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THE SIGNIFICANCE OF AMERICAN AGRICULTURAL HISTORY¹

If it is important to know our country intimately, then it is important that our acquaintance with the rural past should be deeper than it now is. We all of us are only too familiar with certain political and military events which serve as mileposts in the traditional accounts of our development: we all know the proper associations for "Pocohontas," "Bunker Hill," "Great Compromise," "Bull Run," "Tippecanoe," and so on—names associated with striking personalities, with battles, or with political brawls. But having learned all the correct responses to such stimuli as these, one is not much wiser. It is the blood and bones, the nerves and glands of history that we need to know, not merely the color of hair, the slant of nose, and the type of posture of some monumental representation. We need to get inside our living past. There is only one way to do this: that way is to follow men and women in their everyday routines, to observe their work, their leisure, their happiness and sorrow; to see them plow and mow, chisel and hammer, bake and sow; to see their schools, their churches and, above all, their homes. For the home was once the center of American affairs—economic, social, religious, educational—as it is no longer. And it was a home with fields around, for the most part.

American agriculture is an enormously rich and extensive historical domain. Any account of it must describe the successive changes in ways of persuading the soil to yield more generously—and these techniques, of course, have lain close to the hearts of farmers always and have been preserved in endless

¹ This article is substantially the same as the "General Introduction" to the Columbia University Studies in the History of American Agriculture series edited by Harry J. Carman and Rexford G. Tugwell as given on p.v-xii of Jared Eliot, *Essays upon Field Husbandry in New England and Other Papers, 1748-1762* (New York, 1934). The statement is here reprinted with the permission of the Columbia University Press and the editors.

intimate detail; but it must also portray the manners and conventions peculiar to a people scattered in homestead or village groups—for to be "American" once was to behave in these ways. The historian, in other words, deals with the elusive stuff of social life, with the contemporary country pattern and color, so hard to analyze but so unmistakably real; in addition, however, he deals with the great change—the words might well be capitalized—from a rural to an urban civilization, which has been so rapid and so relentless. The people of Colonial America were rural-minded in the eighteenth-century sense. Men then were small creatures scratching the surface of a hostile earth and not making too great a success of it either. None of them had ever heard of a surplus of wheat or cotton; no one anticipated the obsolescence of farming as an occupation: it was assumed then to be the necessary employment of all men but a very few craftsmen, merchants, and politicians. From that time to this—in those three hundred years—there have been more basic changes in ways of living and working than there had been in as many thousands of years before. Our accommodations to these changes have been uncertain, but the historian of agriculture has to do his best, difficult as circumstances have made it for him, to recount these extraordinary phenomena completely and clearly, preserving continuities, tracing probable causes, sketching scenes in contemporary cross section, and pointing toward future policy. He knows that somewhere in our agricultural past there lie the roots of Americanism. What we are in body and spirit is not to be discovered growing embryonically in any early city; its beginnings are to be found on the homestead or in the village, and only there.

It must be remembered always that until recently most of our people lived in the country. Colonial America was a land of farmers; many of the merchants, fishermen, and manufacturers spent some time working on the land, and even those who did not were closely dependent on farmers for their supplies and for their markets. Even when the Civil War was beginning, eighty-five in every hundred persons lived in the country; and one hundred and forty-one cities taken together could show

a combined population of only five million persons, less by a good deal than modern New York. Only since the World War have cities outstripped the country. More than half of our population is now urban; but this development is recent, so recent that most of us still have individual rural backgrounds. As for America, apart from any citizen, it is not to be understood at all by one who forgets its homestead origin, backwoods training, and extremely short acquaintanceship with the furnishings of a sleek suburban life.

Broadly considered, the study of American agriculture includes such basic physical factors as topography, soil, climate, and rainfall, as well as questions relating to the land, such as the acquisition of our vast acreage and its transfer from public to private ownership, tenure, and land values. It also embraces such topics as the source and changing character of our agrarian population, the abandonment of farm lands and their subsequent redemption, the growth of farm tenancy and the appearance of fairly distinct social classes in certain rural sections. Furthermore, within its limits should be considered the more technical subjects of the conservation of soil fertility, drainage and irrigation, seed selection, cropping systems, the history of leading crops, and the many-sided problem of farm management. Historically, the problems of transportation and markets are intimately related to agriculture. So also are the vexing questions of currency and credit, in which farm incomes, banking, interest rates, mortgages and foreclosures, taxation, insurance, and monetary legislation are the main items.

Agriculture is more than an occupation; it is a way of living. Consequently, it deals with a host of topics relating to farm life. Among these are types of houses and surroundings, furnishings, conveniences, rural manners, morals, social customs, and religious practices. The country pastor, the church as a group center, and the prevalence of toleration, bigotry, and skepticism among farmers merit attention. Contrary to the belief held by some persons, the farmer's life is not one of unremitting toil. On occasion, he and his family find time for amusement and entertainment. Any account of American rural life, therefore, should

give considerable space to a description of rural games and sports, sociables and surprise parties, dances, festivals, picnics, and other social gatherings. The country tavern and the county fair also should not be overlooked.

Nor would the story of our agrarian development be complete unless it included some mention of rural health, farm organizations, rural education, and the farm press. Furthermore, the narrative ought to include biographical sketches of our agrarian leaders and an evaluation of the farmer's contribution to American culture. Lastly, it most assuredly should contain a picture of American agriculture as seen by foreign observers.

The exploration of agricultural history even in considerable detail, is not, then, mere antiquarianism; it is indeed much more. It is not only the schoolbook from which we can learn to know ourselves; it also has something to do with the future. How can a nation, equipped with rural ideals and habits of thought, hope to shape a successful future among factories and skyscrapers? And more specifically still, how shall that nation, which apparently is becoming increasingly urban, shape its policy toward what is left of agriculture? There are insistent questions here which, during the next few decades, are apt to be up for consideration time and time again. For any wisdom we can bring to the successive acts of judgement which seem so certainly in prospect, we should be grateful.

Until now, such questions as these have been met in an obviously haphazard fashion. We do not know what a permanent agriculture is, to say nothing of ways to insure it. While the shadow of industry lengthened from East to West, a decline of interest in country things was taking place. The center of our attention was the city. We were learning to build and govern it, to manage its economic affairs, to enjoy its pleasures. Business was the typical activity; to succeed in money-making was the ambition of most young men. For business rewards its devotees in that way, and agriculture never has—at least, so generously or so exclusively. It is for these affairs—business and city life—that Americans have had all the enthusiasm in recent years which went formerly into pioneering. This change

of center, this shift of emotional affiliation, was an inevitable accompaniment of our national transformation; but its inevitability has not lessened its threat to more permanent interest nor kept it from interference with the development of foresight. We are beginning to pay, in the nineteen thirties, for seventy-five years of agricultural neglect; but there is very little reason to think that the pains of payment are making us any wiser for the future; and this may be because we understand ourselves so meagerly. There is, of course, an economic reason for it too. Our agriculture has persistently retained, except in its newest regions, a strictly proprietary organization. This amounted to asking for what happened: the victimization of farmers by manufacturers and merchants who, besides having better organization, an apparently more appealing locale, and richer appurtenances, were much less subject to the vagaries of nature. Of all the kinds of men, the farmer is the greatest speculator. He does not think of himself as a gambler, of course, but he lives every day subject to such risks as would terrify a professional Wall Street operator. However, farmers learn to take their risks calmly. They live in the midst of change, too, quite unaware of its inevitable effect on them, and when they awake suddenly in a strange, hostile world which grudges them not only prosperity but even a living, they are wholly at a loss, when their well-developed imperturbability fails, to know how to meet the situation. Farmers are unwise because they have supposed their status to be permanent; the rest of us are unwise because we have lost any sense of intimacy with the rich arts of agriculture.

It would not be true to say that historians have not touched the field of American agricultural history. A most encouraging start has been made by P. W. Bidwell, Solon J. Buck, Avery Craven, Everett E. Edwards, L. C. Gray, John D. Hicks, Herbert A. Kellar, Ulrich B. Phillips, Earle D. Ross, L. B. Schmidt, Walter P. Webb, and others.² Largely as a result of their efforts,

² In this connection consult the useful *Bibliography of the History of Agriculture in the United States*, prepared by Everett E. Edwards and issued as United States Department of Agriculture, *Miscellaneous Publication 84* (Washington, D. C., 1930), and the News Notes and Comments section of *Agricultural History*, the quarterly journal of the Agricultural History Society.

an increasing number of scholars, young and old, in the past few years, have turned their attention to various phases of American agrarian development. Particularly is this true of teachers of economics and of social and economic history. These teachers have been and still are seriously handicapped by lack of what should be easily accessible source material, definitive monographs,³ and comprehensive texts covering the entire story of American agriculture.

There is a need for three types of material. First, the old agricultural works such as Jared Eliot's *Essays upon Field Husbandry in New England* (1760),⁴ the anonymous *American Husbandry* (1775), and John Spurrier's *Practical Farmer* (1793), have long been out of print and are difficult to obtain. Even many college and public libraries do not possess them. Each work should be reprinted and prefaced with a biographical sketch of the author and a brief introduction. Editorial comment should be added wherever it is necessary to clarify the text.

Representative and significant materials from the sources should also be made more generally available. The observations of foreign travelers in American agriculture,⁵ transactions of agricultural societies, proceedings of State boards and departments of agriculture, farm papers and journals,⁶ account books,⁷ farm diaries,⁸ local histories, tax lists, scrapbooks, market reports,

³ For examples, see W. C. Neely, *The Agricultural Fair* (New York, 1935), and H. F. Wilson, *The Hill Country of Northern New England; Its Social and Economic History, 1790-1930* (New York, 1936), issued as numbers 2 and 3 of the Columbia University Studies in the History of American Agriculture series.

⁴ The initial volume of the Columbia series is a reprinting of Jared Eliot's *Essays Upon Field Husbandry in New England*.

⁵ The significance of the observations of foreign travelers is illustrated in H. J. Carman, "English Views of Middle Western Agriculture, 1850-1870," *Agricultural History*, 8:3-19 (January 1934).

⁶ For an analysis of agricultural periodicals as a historical source, see Everett E. Edwards, "Some Sources for Northwest History; Agricultural Periodicals," *Minnesota History*, 18:407-414 (December 1937).

⁷ G. E. Fussell, ed., *Robert Loder's Farm Accounts, 1610-1620* (London, Royal Historical Society, 1936) is a valuable English example of a useful historical source that has been made available to research workers.

⁸ Rodney C. Loehr, "Some Sources for Northwest History; Minnesota Farmers' Diaries," *Minnesota History*, 18:284-297 (September 1937).

memoirs, letters,⁹ pamphlets, advertisements, records of manufactures of farm machinery, and documents of a genealogical, political, literary, and ecclesiastical nature are the basic materials of interest to those who wish to do research on the agricultural past. Most of this data is at present not only widely scattered but deeply buried in public and private libraries, or, what is even more unfortunate, uncollected in garrets and similar catchalls of unwanted materials.¹⁰

Attention should also be given to biographies of agricultural leaders. A good deal is known, for example, of John D. Rockefeller, Andrew Carnegie, J. P. Morgan, Elbert H. Gary, and other industrial leaders, but almost nothing of Jared Eliot, John Beale Bordley, Elkanah Watson, John Binns of Loudoun, John Taylor of Caroline,¹¹ Edmund Ruffin,¹² Jesse Buel,¹³ Andrew Jackson Downing, Solon Robinson,¹⁴ Thomas Affleck, John Johnston, Jonathan Baldwin Turner, Oliver H. Kelley, William Dempster Hoard, Stephen M. Babcock, Herbert Quick, Seaman A. Knapp, Liberty Hyde Bailey, James Wilson, the three Wal-laces, and numerous other agricultural leaders. In many instances, the biographies of these agricultural leaders should be supplemented by reprints of their pertinent and significant writings.

Finally, there is a great need for a history of American agricul-

⁹ The value of personal letters is illustrated by *Sod-House Days; Letters from a Kansas Homesteader, 1877-78*, written by Howard Ruede and edited by John Ise (*Columbia University Studies in the History of American Agriculture*, 4. New York, 1937).

¹⁰ A discussion of the various sources of special value to those who are doing research in agricultural history and an indication of the depositories that are especially interested in these sources is given in Everett E. Edwards, "The Need of Historical Materials for Agricultural Research," *Agricultural History*, 9:3-11 (January 1935).

¹¹ For a recent study, see H. H. Simms, *Life of John Taylor* (Richmond, Va., 1932). Cf. Avery Craven, "John Taylor and Southern Agriculture," *Journal of Southern History*, 4:137-147 (May 1938).

¹² Avery Craven, *Edmund Ruffin, Southerner* (New York, 1932).

¹³ H. J. Carman, "Jesse Buel, Albany County Agriculturist," *New York History*, 14:241-249 (July 1933).

¹⁴ H. A. Kellar, ed., *Solon Robinson, Pioneer and Agriculturist; Selected Writings, 1825-1851* (Indianapolis, 1936).

ture in one volume. It should be something more than an account of agriculture as an economic activity. It is perhaps pretentious to expect a successful recapture of the atmosphere and habits of mind which surrounded the crafts and arts of homestead, shop, stable, field, mill, and woods, and to differentiate the stages of change from what it once was to what it has now become. That, nevertheless, should be the ambition of agricultural historians.

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SOME PRE-REVOLUTIONARY AGRICULTURAL CORRESPONDENCE¹

Some years ago a search for information concerning the Reverend Jared Eliot of Killingworth, Connecticut, brought to light a collection of thirty-nine letters in the Yale University Library that seem to have been addressed to Eliot as a result of his essays on field husbandry in New England.² The letters, written by more or less prominent persons in England and her Colonies along the Atlantic coast, indicate an active interchange of opinions on agriculture and other matters between 1747 and 1769.³ Eliot's essays attracted much attention since they were largely based on his own experience and observation and, unlike the agricultural works then appearing in the Mother Country, were directly applicable to American conditions. It was natural, therefore, that Eliot should have become a sort of clearing house for those who cared to exchange ideas on farming.

As the writers of these letters were perhaps the outstanding students of the farming problems of that time, it is of interest

¹ A revision of a paper entitled "Some Pre-Revolutionary Correspondence on Agriculture" which was presented at a session of Section O (Agriculture) of the American Association for the Advancement of Science at Des Moines, Iowa, on Dec. 28, 1929.

² Eliot's six essays on agriculture were published as follows: 1,—1748; 2,—1749; 3,—1751; 4,—1753; 5,—1754; 6,—1759. In 1760, they were published together, with the title, *Essays upon Field-Husbandry in New-England, As it is or may be Ordered* (Boston, Printed and Sold by Edes and Gill, 1760). See Rodney H. True, "Jared Eliot, Minister, Physician, Farmer," *Agricultural History*, 2:185-212 (October 1928), which is reprinted with the same title on pages xxv-lvi in Jared Eliot's *Essays upon Field Husbandry in New England and Other Papers, 1748-1762* (New York, Columbia University Press, 1934), edited by Harry J. Carman and Rexford G. Tugwell and issued as number 1 of the Columbia University Studies in the History of American Agriculture series.

³ Through the kindness of Dr. Andrew Keogh, the librarian of Yale University, the author was privileged to study the collection. The U. S. Department of Agriculture Library has photostats of these letters, and twenty-one of them have been printed under the heading, "Letters to Jared Eliot," on pages 191-253 of the 1934 edition of Eliot's *Essays* cited in footnote 2.

to note briefly who they were and what were their main points of interest.

BENJAMIN FRANKLIN'S LETTERS

The collection includes ten letters from "friend Benjamin," and they range in date from 1747 to 1755. The relation between these two men seems to have been very close as evidences of personal affection appear often in Franklin's letters. They were interested in the same subjects,—agriculture, meteorology, mineralogy, and natural history having their places along with allusions to public affairs.

A letter dated at Philadelphia on July 16, 1747, apparently continuing an already established correspondence, discusses the culture of flax in Pennsylvania and states that there were many oil mills there. After referring to the price of linseed oil in both Pennsylvania and New York, Franklin turned to hemp which for the most part was brought by wagon from the Conestoga region on the Susquehanna, "a large fresh-water river." A reference is made to the steel saws made by Eliot who was much interested in the beginnings of the industry, based on small iron manufactures, that still characterizes Connecticut. The prevailing rainy weather with loss of hay led to the observation that it might be an advantage to know what the seasons are in several parts of the country, and he stated characteristically that "One's Curiosity in some philosophical Points might also be gratified by it." He then discussed the relation of wind directions to storm movements, the origin of springs, and the occurrence of deposits of sea shells in high mountains, and Eliot is asked about the pillar-like palisades so conspicuous near New Haven. Franklin then turned to Connecticut's recent tariff laws directed against the manufactures of the neighboring Provinces and pointed out objections and difficulties. Although confessing ignorance of the precise terms of the laws, he doubted the wisdom of such measures; he was certainly not a protectionist at that time.

An undated letter gives details concerning Franklin's farming operations on land near Burlington, New Jersey, acquired about eighteen months before. It deals with drainage and grasses subsequently planted. Clovers had a large part of his attention,

especially the heaving action of frost in throwing the young plants out of the ground. This letter is not complete in the manuscript, but Jared Sparks made it appear so in his edition by cutting off the last sentence at a convenient place and signing it for the writer.

In a letter written on October 25, 1750, Franklin asked about the methods of fencing in use on Long Island and remarked that timber was growing so scarce that there was no longer sufficient even for fences.

On December 10, 1751, he wrote to Eliot concerning the making of potash by the Russian method; a friend whose life depended on the success of a tracheotomy operation, a piece of lead pipe having been inserted into his windpipe to facilitate breathing; and the Norfolk system of farming being developed on sandy ground in England.

Other letters similar in character followed: Franklin was soliciting information for Eliot's prospective essays; he criticized local Yankee expressions; sent Barbary barley seed thought to be the finest in the world; and discussed physical problems such as air bubbles in water, formation of dew, and direction and duration of the trade winds, and Smeaton's air pump. A letter of November 8, 1753, apparently got into the hands of the President of Yale College, for T[homas] C[lap] sent it on to Eliot and wished another chance to see it.

A rake and a fork made by a Philadelphian named Roberts were forwarded to Eliot by Franklin, who offered as an alibi for the donor that "he is a Man of much Business, and does not love Writing." In another letter presented personally by John Bartram, while "upon one of his Rambles in Search of Knowledge," Franklin introduced the botanist to Parson Eliot in the most charming terms. "Mr Bartram I believe you will find to be at least 20 folio Pages, large Paper, well fill'd; on the Subjects of Botany, Fossils, Husbandry, and the first Creation."

JOHN BARTRAM'S LETTERS

The first of John Bartram's series of five letters was written in 1752. Eliot had sent him a letter by William Franklin asking his opinion of the still-new teachings of Jethro Tull in England.

Tull's epoch-making folio of 1733 on *Horse-Hoeing Husbandry* had glorified tillage, advanced a new theory of plant nutrition, and furnished a basis for a host of later writers who followed his teachings more or less closely. The influence of this work by the English invalid lawyer was being felt in the Colonies. Probably Tull's philosophy of root pasture was resulting in tillage experiments, but it is doubtful whether many of the complicated machines first designed by him found their way to America. The contents of other letters in this collection indicate that the colonists were trying their own hand at machine-making.

Bartram believed that Tull and his converts were honest in reporting the advantages claimed for the new system as used in the Mother Country, but he thought that the drier, hotter climatic conditions in the Colonies would make it less valuable. He accepted the current view that fermentations in the soil resulted in the loosening and lightening of its texture and feared exposure of the soil to the sun since, like most agricultural philosophers of his time, he believed that the heat would lead to the exhalation of valuable particles essential to fertility. Bartram dissented from Tull's fundamental doctrine that the soil contains all of the required elements and thorough tillage alone is able to unlock them. He contended that fermentable material (fertilizers) must be added to the soil if fertility is to continue even with the help of thorough tillage.

After rendering his adverse verdict on Tull's teachings, Bartram devoted two long sheets to a very interesting discussion of geological changes indicated by features he had observed on the Coastal Plain to the southward. Heavy sedimentation from the direction of the mountains, and changes in land levels bringing marine-shell deposits above water, with subsidence sinking other parts, greatly aroused his curiosity and stirred him to religious meditation. A few sentences may be quoted:

this account may Seem very odd to some people who is unaquainted with y^e rough ragged dress our great mountains (towards y^e sources of our great rivers) appears in but I think these Suggestions may be indulged to one that hath so often (with deep humility & adoration to y^e allmighty power) vewed those exalted towers; those dreadfull Precipicis. y^e rocks washed bare many undermined by furious torrents & tumbled down into y^e water courses. others hanging over or standing

tottering on y^e others shoulders. deep valeys wore to y^e solid rock y^e mighty ridges wore throg that vast bodies of water might pass with thair muddy sandy contents which here appears to have been in such large quantities that one may wonder as much where it could be deposited. as when we are on y^e low lands where so much soil could be fetched from as to raise so large A tract so high Above y^e surface of y^e sea shore.

An undated and unaddressed communication, written after his trip to Oswego and Lake Ontario in 1743, is in the file, and though further study might place the date more accurately, it was probably written about 1750. In it he discussed with great breadth the chief geological features of the Coastal Plain and also described many inland situations. Comments on local agricultural customs are scattered throughout the paper. It constitutes a very important contribution to the early American geological study and emphasizes the scientific importance of the work done by this old Quaker botanist.

A few of his agricultural observations may be noted. Reference is made to the Indians of West Jersey using shells to improve their sandy lands, a practice also followed by Indians in Maryland. At many places along the coast, shell marls representing fossil deposits attracted his attention, and he commented on their potential significance to agriculture. Bartram held that the green-sand marls, the glauconite deposits found by Edmund Ruffin seventy years later, contained valuable quantities of potassium, but he made no allusion to their use in farming. It seems probable that this value was not recognized until after the American Revolution. He discussed the high agricultural value of lands overlying limestones and dealt exhaustively with the havoc wrought by erosion in the higher lands, pointing out that the fertile soils are transferred to the low lands. In a detailed discussion of the causes for occasional phenomenal fertility of soils, he said:

An example . . . is very Conspicuous near Albany where Hudsons River brings down anually A very rich sediment which meeting with y^e tide, or swelling water. which checks y^e Currant is deposited on y^e low lands on each side which so fertiliseth them as never to be worn out no more than Egypts.

He described fertile areas on the Susquehanna River where locust trees grew to a diameter of two feet, sumacs became high enough

to make eight rails apiece, and grapevines reached a diameter of six inches. Unfortunately only four pages of this valuable account are extant.

In a letter dated January 24, 1757, Bartram replied to one from Eliot sent by way of their mutual friend, Franklin. He excused the tardiness of his reply by stating that Eliot's letter reposed in "friend Benjamin's" drawer for about nine months before it was discovered and forwarded. Having expressed regret that Eliot did not receive the hollow stick sent him, since it was filled with indigo seed, he discussed the proper treatment of reclaimed salt marsh lands, and closed with a full description of his method of splitting stones by use of wedges, a method he preferred to "blowing with powder." He enclosed a sheet of sketches to illustrate his method. Even today Bartram's garden, preserved as a park by the city of Philadelphia, has several examples of his skill in stone work.

The discovery by Eliot, who was much interested in iron-making, that usable malleable iron could be made from the black sand found on the shore not far from New Haven, brought an echo from Bartram who mentioned the occurrence of similar sand in Virginia that was attracted by his magnet. Changing the subject, Bartram referred to the undesirable results arising from the use of strong drinks and urged the greater use of wine, thus anticipating Jefferson and others interested in the temperance movement that gained headway in early post-Revolutionary days. Like Jefferson, he called attention to the value of native grapes for this purpose:

in my Journey from carolina & since. I have thought much of y^e cultivateing of our native grape; as y^e generality of people is so eager after strong liquors & spirits; y^e markets is not to be overdone with wine and brandy; & some of our grapes is excelent for both if we could raise A sufficient quantity of vines either by layers, cuttings or grafting of y^e best sorts: I intend to make several tryals of these methods this spring; I have A good opinion of y^e great summer or bull grape of Carolina as I know it will live well by transplanting & I hope by layers or Cuttings.

Bartram noted that plants of the Scuppernong types (*Vitis rotundifolia*) had done well in his Philadelphia garden for two years. This is an important northern record, for this grape now

survives with difficulty even at Washington, D. C. He hoped to accept Colonel Henry Louis Bouquet's invitation to go with him down the Ohio to the Mississippi the following summer to take possession of the new acquisitions gained in the French and Indian War. His letter is replete with information concerning his recent long journey to the Carolinas and westward to the New River. The Hot Springs of Virginia and other points destined to command much interest later are also mentioned.

Bartram's last letter, undated, but written after he had returned from Pittsburgh and his expeditions down the Ohio and up the Monongahela rivers, refers to great banks of coal, slate, limestone, whetstone, and marl. He closed by sending seeds of "y^e true Marssmallow" and the broad-leaved sweet lavender. His correspondence with Eliot seems to have ended in 1762, shortly before the latter's death.

WILLIAM LOGAN'S LETTERS

Three letters in the neat, precise handwriting of William Logan, son of James Logan and attorney for the Penn family, who was for a time governor of Pennsylvania, are in the collection and date from 1754 to 1758. Logan learned of Eliot through his early essays and through their mutual friend, Benjamin Franklin. On July 25, 1754, Logan praised the essays as the result of much expensive and time-consuming work and more valuable to the Colonies than books from the Mother Country written for quite different conditions. After thanking Providence for making it possible for him, while still young, to retire from merchandising and law to his father's 500-acre farm, Stenton, where he could indulge his inclinations toward agriculture, he referred to Tull's drill plow. A neighbor had carried out a test on wheat sowed and plowed-in after the old manner, and on other plots sowed by the machine, and he had received like yields, in all cases 15 bushels per acre. He referred to the simpler form of drill plow devised through the joint efforts of President Clap of Yale and Eliot, and wished to buy such a machine, suggesting an attachment for sowing turnip seeds. This first letter closes with the statement that "my Friend. Benj Franklin tells me he Will

frank all my Letters that they may Go Postfree, I shall be pleased As I have Said to hold a Correspondence with thee in this way."

On October 14, 1755, on returning from New England, Logan found letters from Eliot and one of his Yankee-made drill plows. This plow was appraised in no uncertain terms: "it is I think one of the Worst pieces of workmanship I Ever Saw put together. . . I think One Days plowing Would tear it all to peices." He complained in similar terms of a dung drill. After laying this foundation of complaints, Logan came to the point and asked what sum he owed Eliot and how he was to pay it. The weather as well as Eliot's machines was against him. He intended to have a long talk with Eliot while in New England but had taken advantage of a chance to travel by boat part of the way, being "tired with Your Ironbound Countrey & Stoney Roads." He summed up his observations on New England agriculture thus: "I Can't Say I met With anything Instructive relating to Farming in your Parts, I think the Contrary, & that the Slovenlyness too generally prevails & that Nature does more for your People in general than they do by any Industry." Everything was bad; clover seed from England would not grow, and seed ordered from Rhode Island failed to arrive. He added a postscript to say that rheumatic pains had seized him, but he had embarked on a program of liming and looked with hope into the future.

Doubtless Franklin mailed post-free the letter of September 23, 1758, in which Logan chided himself for his failure to pay for the worthless drill plow. He asserted that he had not been able to find a way to get the money to Connecticut since travellers went by boat to avoid the "Stoney Roads," and hence not through Killingworth. However, accompanying the letter now placed in the hands of a young Rhode Islander named Pease, who was going on pleasure bent to that stony land, was "a small bag Containing eight Dollars, which He has promised to deliver thee." The bill was really for seven dollars but Logan sent eight, hoping that the extra dollar "Will remove any hard thoughts for my Delay." The habitual postscript leaves the grievance in the ascendant: "I thought it not improper to mention to thee that I Could never make any use of y^e Plow."

Eliot had probably had enough of this mood since the correspondence seems to have ceased at this time, although Logan apparently wanting more letters, said in closing: "When thou inclinest to Write to me, I desire it may be by the Post, as I shall never begrudge the Charge of a little Postage for the Pleasure of Hearing from a Friend."

PETER OLIVER'S LETTERS

Six letters from Judge Peter Oliver of Middleborough, Massachusetts, form an important New England contribution to this file of correspondence. His highly independent attitude as a Loyalist when the tide of revolution was rising shows him to be a man of strong character likely to hold definite opinions. His printed works are mainly poetical or Scriptural, but his interest in farm problems is indicated in his correspondence with Eliot.

His first letter, dated March 31, 1756, about the time that he was writing a poem on the death of Josiah Willard, the so-called "good secretary" of Massachusetts Bay, appears to open on his part a correspondence initiated by Eliot. Apparently the latter had sent copies of his last essays and solicited opinions on Tull and other matters. Eliot had also sent a sample of his steel work, the sale of which Oliver promised to promote. The judge, who had made a drill plow modelled on Tull's later simplified plans, brought Eliot up-to-date by referring to Tull's third edition as a great modification and improvement. Having explained that he had been converted to Tull's doctrines and had abandoned the use of manures in favor of tillage, he cited a method of raising calves described in the Dublin Society's publication, and then turned to the drainage of swamps, a favorite subject with Eliot, and reported success and failure with the crops grown on the new lands. He did not want his letters used by Eliot in the essays because of his loose style. After relating his struggle with a new weed that had appeared in his fields, he reported his experiment on the continuous culture of wheat on the same field, apparently to test the efficiency of Tull's tillage doctrine. The strong hold that experiments in physics had on the minds of men in those days is seen in his statement that he was not then carrying on experiments in natural philosophy. He then related his

experience with *praeternatural philosophy* in which an especially gifted person found metals by means of a divining rod. Critical experiments that had convinced him are detailed, and he ventured the opinion that this ability will be made to serve the general good and "will occasion as much Speculation as Electricity." Franklin's famous kite experiment had been carried out about four years previously.

In a subsequent letter Judge Oliver wrote of experiments in the use of the marl found in many places in his neighborhood and rejoiced in the interest that others were taking in agricultural improvement. He praised Eliot for his efforts in the public interest and asked his opinion on planting locust trees. The letter closes with a rhapsody on the successes of the British armies against the French and Indians, ascribing them to Providence in spite of British inefficiency. His reports on Smyrna wheat sent by Eliot, a Virginian account of lucern growing received from the same source, and the favorable operation of the iron works in which Eliot's son Aaron was active, are in rather evasive terms. He thought that unless mountain ore could be found conveniently situated in the Northern Colonies, the Provinces to the southward would have a decided advantage in manufactures. Considerable attention was given to the iron question in later correspondence, Judge Oliver reporting results of operations in his own furnace for which he had a supply of mountain ore. He tried natural lodestones of which he had twenty tons shipped in one vessel. By these natural magnets the iron particles in the sand could be separated and the iron concentrated. He sent a specimen to Eliot for trial. Already discord in the Colonies had appeared, and being an intense Loyalist, Oliver expressed the hope that Eliot and he might see alike. Eliot died not many months later.

LETTERS BY PETER COLLINSON AND RICHARD JACKSON

The letters from the English Quaker cloth manufacturer, Peter Collinson, and from Richard Jackson, who later represented Connecticut in England, are as varied in subject matter as those already noted. Tull's tillage, the Norfolk crop rotation that reached its greatest fame several decades later in the day of

Arthur Young, botanical excursions, the same keen interest in natural philosophy that came so often to the fore, occasional discussions of trade conditions, and sometimes the deeper matters of colonial politics received attention. Connecticut's proposed colony on Lake Erie was dealt with, and adverse English action was foreshadowed.

CONCLUSION

The evidence afforded by the thirty-nine letters in Jared Eliot's papers indicate that, even before the French and Indian War, there was a group of thinking men distributed from far-away London to Halifax and Philadelphia who had sufficient common interest in agricultural problems to carry on an active correspondence. In addition to the letters already mentioned, the collection includes single contributions from Nathan Bowen of Marblehead, Massachusetts; Thomas Fitch of Norwalk, Benjamin Stiles of Hartford, and Robert Walker of Stratford, Connecticut; James Monk of Halifax, Nova Scotia; and H. W. Robinson of South Kingston, Rhode Island. Eliot was the central force in this circle, with Benjamin Franklin, John Bartram, Judge Peter Oliver, and others actively participating. This colonial group was in close touch with the Mother Country, chiefly through Peter Collinson. The progress of experimental science was followed eagerly by all, the kite-flying experiment of one of their circle being the crowning achievement, and politics occasionally furnished food for discussion. This sort of thing was already bringing the Colonies into working relations with each other and later aided in facilitating common action against the Mother Country.

The collection illustrates the value of letters by persons interested in agriculture as sources for agricultural historians, and it is hoped that letters of this nature will be brought to the attention of research workers in the field of agricultural history and, if in private hands, to the attention of depositories which are specializing in these kinds of historical sources.

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AGRARIAN INDIVIDUALISM IN THE SOVIET UNION: ITS RISE AND DECLINE

PART 2

THE NEW ECONOMIC POLICY

The bitter hostility of the Russian peasants to the regime of requisitions, underlined by a series of local rebellions and echoed even in the armed forces (e.g., the famous Kronstadt sailor mutiny), convinced Lenin in the spring of 1921 that solution of the food crisis and economic recovery were impossible without first appeasing the peasantry. This, he clearly saw, involved the reestablishment of more normal economic relations between the village and the town, the abolition of requisitions and restoration of the process of market exchange, in short, a reversal of the policy of War Communism. "War Communism," wrote Lenin, "was forced by war and destruction. . . . It was a temporary measure; a correct policy for the proletariat, carrying on a dictatorship in a country of small peasant farmers, is that of exchanging for grain industrial products needed by the peasants."⁴⁶ He admitted with characteristic frankness that nationalization of industry and trade had been carried too far, and that a partial retreat to capitalism was, under the circumstances, unavoidable.⁴⁷

Back in the spring of 1918, prior to the stampede into War Communism, Lenin had contemplated an economic system, as a transition to socialism, which he called state capitalism. It was characterized by a British economist as "centering round a process of market exchange between socialist industry in the towns and the backward individualist peasant economy of the countryside, the former necessarily having largely to adopt its own character to the requirements of the latter."⁴⁸ With the

⁴⁶ Lenin, *Works*, 26:332.

⁴⁷ *Ibid.*, 240-241.

⁴⁸ Maurice Dobb, *Russian Economic Development since the Revolution*, 161 (New York, 1928).

civil war over and the country in need of an "economic breathing spell," Lenin proposed to follow this course. Only in this manner, he believed, could a *smychka* or junction between the urban socialist proletariat and the large masses of peasantry be accomplished and the urgently needed expansion of production brought about. In spite of his overwhelming moral authority, Lenin often encountered stiff opposition in the Party conclaves, and although the X Party Congress in March 1921 was no exception, he easily secured the adoption of the celebrated New Economic Policy or NEP.⁴⁹

By the decree of March 21, 1921, which ushered in the NEP, the requisitions were replaced by a grain tax in kind and the right of trading on a local scale was restored to the peasants. This action was the opening wedge for a general revival of the free market and money economy abandoned during the era of War Communism. The attempt to force the peasants into the collective mould was discarded, and a series of legislative measures culminating in the Land Code of October 30, 1922, gave them freedom in the choice and security of land tenure so long as the farming was non-capitalistic in character (*trudovoe khozaistvo*).⁵⁰

⁴⁹ Except for a few stray articles in the Soviet press on the subject of taxes versus requisitions, there were no outward signs of the contemplated momentous change in policies before the X Party Congress which, incidentally, was concerned most of the time with other more controversial issues. For a few facts on the origin of the New Economic Policy within the inner councils of the Bolshevik Party, see Lenin, *Works*, 26:651-653. See also [Proceedings of the Tenth Congress of the Russian Communist Party, March 1921], 405-450 (Moscow, 1933); Chamberlin, *Russian Revolution*, 2:436-449; Dobb, *Russian Economic Development*, 160-165; Paul Haensel, *The Economic Policy of Soviet Russia*, 32-36 (London, 1930); L. L. Lorwin, *Labor and Internationalism*, 225-226 (New York, 1929); Vladimir Gsovski, "The Soviet Concept of Law," *Fordham Law Review*, 7:23-28 (January 1938).

⁵⁰ The Land Code of 1922 applied to the Russian Soviet Federated Socialist Republic which comprised the largest part of the Soviet State. Other constituent republics of the U.S.S.R., such as the Ukraine, for instance, had similar laws patterned largely on the Land Code of R.S.F.S.R. but with some local variations, which, however, did not affect the basic principles of Soviet agrarian legislation. Until December 15, 1928, there was no formal federal land law just as there was no federal Commissariat (Ministry) of Agriculture until the end of 1929. For detailed discussion of the NEP land legislation, see Rosenblum, *Zemelnoe Pravo*, 116-325.

Although the principle of land nationalization was legally retained, the State was no longer bent on the introduction of some egalitarian system of land distribution toward which the Socialization Law of February 19, 1918, was directed or the reorganization of agriculture on a socialist basis, as proposed by the law of February 14, 1919. The existing distribution of landholding was in fact legalized. The permission to make temporary leases of land when the peasant was for a time unable to cultivate it, and to employ a limited amount of hired labor, granted by the new laws, constituted a decisive break with the attitude of the early Soviet agrarian legislation which prohibited such practices. In any event, farming, whether on permanently held or leased land, had to remain a family, non-capitalistic type.

However, these restrictions were irksome; they hindered agricultural expansion and led to a considerable amount of evasion. Furthermore, the arbitrary administrative methods of War Communism died slowly in the villages and the behavior of the rural Communist officials provoked a great deal of discontent among peasants. A. I. Rykov, who succeeded Lenin as the chairman of the Council of People's Commissars of the U.S.S.R., characterized the situation in the countryside in the spring of 1925 as follows: "Administrative abuses instead of enforcement of Soviet law; illegal taxation of local population; lack of faith on the part of the peasantry in the possibility of the free exchange of goods; absence of rural soviets actually elected by the peasants; numerous attacks on the peasant-correspondents of the Soviet press; etc."⁵¹

To remedy these unsatisfactory conditions and stimulate peasant productivity, a further liberalization of the Soviet policy toward individual peasant farming took place early in 1925. At this time the outstanding Bolshevik theoretician, Nikolai Bukharin, openly proclaimed the advantage to the State of the peasants enriching themselves and voiced the unorthodox view that even so "alien" an element in a socialist body as the Kulaki might eventually be assimilated with the help of the cooperative

⁵¹ [The Basic Questions of Our Policy in the Village], *Na Agrarnom Fronte*, 10:8 (October 1925).

movement. He said: "Our policy with respect to the village must develop in the direction of narrowing and partially removing restrictions hindering the growth of the prosperous and Kulaki farmers."⁵² Not only Bukharin, who later became tainted with the heresy of the "Right Deviation," but even Kamenev, one of the future leaders of the Left (Trotsky) Opposition, staunchly defended the progressive, strong, individual farmer. "We would have been mad," said Kamenev, "if we considered a peasant who utilizes conditions created by the Soviet State to increase his prosperity and to raise the level of his farming as a Kulak. We would be cutting down the branch on which we sit."⁵³ This liberal attitude was reflected in the decisions of the XIV Party Conference and the III Soviet Congress in April and May of 1925, which were also approved by the XIV Party Congress in December of that year.

By far the most important practical step taken by the Kremlin was the relaxation of restrictions on leasing land and the employment of hired labor in farming. In 1922 when the leasing of land was first legalized, it was permitted for a period not exceeding one full rotation cycle, or, in the absence of regular crop rotation, not exceeding three years. In 1925, the legal leasing period was extended to two rotation cycles for a system of six or more crops, or twelve years in case of a smaller number of crops or the absence of regular rotation. By a decree of the Council of People's Commissars of the U.S.S.R., of April 18, 1925, hired labor when used to supplement that of the peasant family was exempted from the jurisdiction of the general labor code and was subject to special rules which were more elastic than those of the general code regarding such matters as the length of the working day, employment of young persons, etc.

Much attention was given to the problem of curbing the arbitrary methods of the communist officials in the village who needlessly irritated the local population. With this end in view, it was decided to democratize and popularize the village soviets.

⁵² [New Problems of Our Peasant Policy], *Pravda*, Apr. 24, 1925.

⁵³ Report at the VII Soviet Congress of the Moscow Province in *Ekonomicheskaya Zhizn*, Apr. 14, 1925.

A similar policy of checking arbitrary administrative interference was to be pursued with respect to the rural cooperative movement.

The agricultural tax which proved burdensome was reduced and, to make it more certain and equitable, a number of improvements were ordered in its administration. A large share of the receipts from this tax was to be allocated to the rural district soviets. Considerable emphasis was laid on increasing the efficiency of peasant agriculture and particularly on the work of reorganizing the scattered fields or *zemeleustroistvo*, which in the case of the poor peasants was to be performed at the expense of the State. These and various other measures served to round out and deepen the NEP in the countryside and to eliminate the administrative survivals of war communism.

RESULTS OF THE NEP

The NEP was undoubtedly a victory for small peasant-family farming, but not an unqualified victory. The land, as distinguished from its product and the capital, mobile and immobile, applied to it, remained legally the property of the State. The peasant family merely held it rent-free indefinitely, provided that it was properly utilized and that non-capitalistic family farming (*trudovoe Khozaistvo*) was maintained. Furthermore, between the individual household actually using the land and the State, there was, in the majority of cases, an intermediary in the form of a land commune or *zemelnoe obshchestvo* to which the land was allotted in the first instance, and which determined the size of the holdings and the method of land tenure of its members. However, in practice this system did not differ greatly from that prevailing before the revolution.

It will be recalled from the discussion in Part 1 of this article that, prior to the Stolypin reforms of the pre-war decade, unlimited individual property rights extended only to a relatively small part of the land held by peasants, namely, the area purchased from the estates. Especially under the communal form of land tenure, involving periodic or irregular repartition of land and prevailing over a large part of Russia, the peasant was not absolute master of his land. However, a movement for in-

dividualization of Russian peasant agriculture was the keynote of the Stolypin reforms of the last pre-revolutionary decade only to be cancelled by the revolution of 1917-18 and the agrarian policy of War Communism. The NEP land legislation, of course, did not restore the legal status of a full-fledged individual peasant proprietor which was the ideal of the Stolypin laws; but neither did it bind the peasants to communal land tenure as the Tsarist legislation of the late nineteenth century attempted to do. According to the law of 1922, a minority of 50 households in the commune, or one fifth of the total number of households where there were less than 250, could demand separation from the commune even against its will and a consolidation of their scattered strips of land into segregated unitary holdings. Even a single household could require such a segregation at the time of the land partition or arrange it with the consent of the commune at any other time.

Segregation of individual peasant holdings into unitary plots, which was the cornerstone of the pre-war government land reform, was not favored by Soviet practice as it was considered too individualistic. For the most part, other methods were used by Soviet land experts to diminish the scattering of farm land and the distance between the farmstead and the field. Whole villages, for instance, were subdivided into smaller units; the numerous strips of land cultivated by each individual farmer were consolidated into a smaller number corresponding to the number of fields in the crop system; the latter itself was often simultaneously rationalized. Thus, in 1925, over 7,500,000 acres and in 1926 over 11,000,000 acres were rearranged in this manner; while segregation of individual holdings amounted during the same year to 2,400,000 and 2,200,000 acres, respectively.⁵⁴

Restrictions on the leasing of land and employment of hired labor, which were unknown during the pre-revolutionary period, existed during the NEP, but were considerably relaxed in 1925 to permit development of peasant agriculture within the ambit of non-capitalistic family farming. After all is said and done, how-

⁵⁴ See Rosenblum, *Zemelnoe Pravo*, 348-351; O. Auhagen, "Die Neueste Russische Agrargesetzgebung," *Berichte über Landwirtschaft* (n.f.), 10(2):200 (1929).

ever, there remains a presumption that the absence of a clearly developed system of individual property rights of peasants in their land tended to make the agrarian individualism of the NEP period more vulnerable to the collectivist attack of the Soviet Government.

Such a frontal collectivist attack, however, was not resumed by the Government, as we shall see, until the late twenties. In the meantime, the socialist tactics in the countryside consisted of "boring from within" by means of the revived cooperative movement which was endowed by a new important mission of carrying socialism to the village. This was another legacy which Lenin left to his Party. About a year before his death he wrote two short but highly important articles on cooperation in which he developed the thesis that, with the political power and the ownership of the means of production in the hands of the proletarian State, cooperation becomes exceedingly important as a method of transition to the new order, which is "simple, easy, and accessible to the peasant."⁵⁵ This was an appealing idea, and it became the leitmotif of numerous authoritative Soviet pronouncements, and much of the writing on the agricultural problem in the middle twenties.

With the active encouragement and support of the Soviet Government cooperative organizations played an increasingly important rôle in the Russian village during the NEP period. In 1927 there were over 26,000 rural consumers' cooperative societies with a membership of more than 9 million; over 28,000 producers' cooperatives, and nearly 24,000 credit, marketing, and insurance cooperatives with a total of 9½ million members. In addition there were some 17,000 collective farms, including about 1,300 communes with a membership of over 300,000. The membership figures in the various cooperatives are of course overlapping. Furthermore, the consumers' cooperatives really became the retail distributive arm of the Soviet State, which waged a systematic campaign against private trade. It is doubtful whether many of these cooperatives could have stood on their own feet, and they certainly were not distinguished by

⁵⁵ Lenin, *Works*, 27:391-397.

efficient and economical operation. Nevertheless, even if consumers' societies were omitted, still the great strides made by the cooperative movement during the NEP period cannot be gainsaid, especially when it is recalled that before the war there were only 27,000 agricultural cooperative societies in the larger territory of the Russian empire.⁵⁶ It is symptomatic that these various forms of voluntary cooperation were suppressed or completely subordinated to the State during the collectivist periods preceding as well as following the NEP.

The principal objective of the Soviet Government in embarking on the NEP—the recovery of Russian agriculture—was not long in being fulfilled. The Government had early expressed satisfaction with the results of the New Economic Policy. For instance, a resolution of the XIII Party Congress held in May 1924 stated: "The Policy of the NEP in the village basically had entirely justified itself; the productivity of agriculture and the prosperity of large peasant masses are undergoing a slow but uninterrupted progress."⁵⁷

At the outset of the NEP in 1921, agricultural expansion was retarded by the disastrous crop failure which led to a further decline in acreage and livestock numbers in the regions affected. In the areas which were not affected, however, recovery began at once. With better climatic conditions in 1922, a turning point was finally reached and a general rapid recovery ensued during the subsequent years. Between the low point of 1922 and 1927, the total crop area of the U.S.S.R. increased 45 percent, and the num-

⁵⁶ E. T. Blanc, *Cooperative Movement in Russia*, 219-269 (New York, 1924); International Labor Office, *The Cooperative Movement in Soviet Russia* (Geneva, 1925); Calvin B. Hoover, *The Economic Life of Soviet Russia*, 225-246 (New York, 1931); sections on Russia by E. M. Kayden, A. N. Antsiferov, and Margaret Digby, "Cooperation," *Encyclopedia of Social Sciences*; L. Kritsman, P. Popov, and Ia. A. Iakovlev, eds., *Selskoe Khoziaistvo Na Putiakh Vosstanovleniia* [Agriculture on the Way Toward Reconstruction], 714-766 (Moscow, 1925); Ia. A. Iakovlev, ed., *K Voprosu O Sotsialisticheskoi Pereustroistve Selskogo Khoziaistva* [Concerning the Question of the Socialist Reconstruction of Agriculture], 159-308 (Moscow, 1928).

⁵⁷ For resolutions of Party congresses and conferences, see *Vsesoiuznaia Kommunisticheskaia Partia (b) v Rezoliutsiiakh i Resheniiakh S'ezdov . . .* [All-Union Communist Party in Resolutions and Decisions of Congresses, Conferences and Plenary Sessions of the Central Committee, 1898-1933], Part 1-2.

ber of horses 31, and cattle 48 percent. There were, of course, regional variations in the degree of recovery, but, as a whole, by 1927, agriculture was close to the pre-war status. Moreover, some progress was made toward a much-needed diversification of Russian agriculture, which was characterized by a heavy predominance of small grains.⁵⁸ This process was especially noticeable in the southern steppe regions. There was also evidence of improvement in the technique of peasant farming, such as the increasing use of fallows, better varieties of seed, and types of animals, and the like.

The peasants even made a modest beginning in the use of tractors, and, either individually or cooperatively, owned nearly 11,000 of the 24,500 tractors on farms on October 1, 1927. In general, the limited experience of the NEP tends to substantiate the view entertained by some students of the Russian agrarian problem that, once the temptation of undivided estate land was removed, the peasants would settle down in earnest to the task of improving and intensifying their farming.

In one important aspect, however,—commercial production,—the recovery of Russian agriculture lagged. While the total agricultural production in 1926–27 was approaching the pre-war volume, according to an estimate of the Gosplan, commercial production was still much lower.⁵⁹ This fact was most disconcerting to the Government, which was embarking on an ambitious industrialization program requiring a large supply of cheap foodstuffs and agricultural raw materials for export and domestic consumption. Agricultural exports which, before the war, constituted the backbone of Russia's active balance of trade hardly reached by 1926–27 one fourth of their 1913 vol-

⁵⁸ See Timoshenko, *Agricultural Russia and the Wheat Problem*, 191–195; O. Auhagen, "Agrarverfassung und Landwirtschaft im Bezirk Odessa," *Berichte über Landwirtschaft* (n.f.), 10(3):405–410 (1929); M. Wolf, [In the Steppe Ukraine], *Na Agrarnom Fronte*, 10:147–154 (October 1925); A. M. Bolshakov, *Derevnia, 1917–1927* [The Village, 1917–1927], 43, 55 (Moscow, 1927).

⁵⁹ See I. N. Girkovitch, and I. N. Ozeroff, [Agriculture and Agricultural Market in 1926–27], *Economic Bulletin of the Conjuncture Institute*, 11–12:52 (Moscow, 1927).

ume.⁶⁰ The situation was particularly unfavorable with respect to grain exports, notwithstanding favorable harvests in 1925 and 1926. During the last five pre-war years Russian exports of the principal cereals—wheat, rye, barley, oats, and corn—averaged 12 million short tons, but in 1925–26 and 1926–27 they amounted to only 2.1 and 2.7 million short tons respectively.

Analysis of the causes of the lagging commercial production reveals the serious drawbacks which accompanied the victory of the small peasant cultivator and the flaws in the Government's economic policy—a combination which proved fatal to the NEP. To begin with, the disappearance of the estates could only have an adverse effect on commercial production. Despite the encroachment of peasant agriculture on estate farming previously described, the estates played a significant part in commercial agriculture before the war, especially in the case of an important export crop like wheat. Partly due to better land and partly to improved technique, the yields of estates were higher than those of peasant holdings and obviously a much larger proportion of this output was sold on the market since the peasants as a class produced primarily for their own consumption.

For instance, in the case of wheat it was estimated that during the years 1909–1913 the peasants in twenty-three surplus-producing provinces of European Russia brought a little over half of their wheat production to the market compared with approximately 80 percent supplied by the estates.⁶¹ As a result, the large farms with only 14 percent of gross wheat production accounted for 20 percent, or 70 million bushels, of the commercial wheat supply of these provinces which was equivalent to more than 40 percent of the average Russian wheat exports during this period. It must be concluded, therefore, that the disappearance of the estates, especially since it was effected at one stroke during the revolution, was bound to leave a gap in commercial agricultural production.

⁶⁰ *Ibid*, 60. No adjustment has been made in the 1913 figures for post-war territorial changes, but most of the important agricultural export regions were within the present territory of the U.S.S.R.

⁶¹ Kondratiev, *Rynokh Khlebov*, 15.

Not only were the large estates broken up but the peasant holdings decreased in size and their number increased rapidly. In 1916, it was estimated that there were less than 18 million peasant households in the present territory of the U.S.S.R.; by 1925 there were nearly 24 million, and during the next three years they increased by another 1,600,000.⁶² The size of the peasant farm-unit can be better visualized by a comparison of the average acreage sown per farm in the U.S.S.R. and the United States. In the leading Russian wheat-producing regions it varied, according to the sample census of 1927, from 17 to 35 acres, while in the most important wheat-growing States of the United States the range was from 140 to 270 acres per farm according to the Census of 1925.

There is abundant evidence that, under Russian conditions, the smaller peasant farm-unit was less efficient technically and placed a smaller proportion of its output on the market.⁶³ The disadvantage of the small size was aggravated by the scattered-strip system of farming which increased with the frequent division of land during revolutionary and post-revolutionary periods. Moreover, many of the small holdings lacked draft animals and implements which were distributed less equally than land. In 1926, according to a sample census, in such an important region as North Caucasus 40 percent of the peasant households were without work animals, while in the Ukraine the number was 45 percent. These peasants were often faced with the alternative of hiring implements and livestock from their more well-to-do neighbors in order to continue farming at all or of leasing land and, perhaps, hiring themselves out to the latter.⁶⁴

⁶² See A. Wainstein, [The Number and the Trend of Peasant Households in Pre-War Russia], *Statisticheskoe Obozrenie*, 7:9-19 (July 1929); *Statisticheskii Spravochnik S.S.S.R. za 1928* [Statistical Abstract of the U.S.S.R. for 1928], 82 (Moscow, 1929).

⁶³ See P. I. Liashchenko, *Russkoe Zernovoe Khozaistvo . . .* [Russian Grain Farming in the System of World Economy], 337-342 (Moscow, 1927); G. A. Studensky, [Intensivity and Pseudo-Intensivity of Russian Peasant Agriculture], *Trudy Samarskogo Selsko-Khozaistvennogo Instituta* [Annals of the Samara Agricultural Institute], 4:45-81 (Samara, 1927); A. Mikhailovskii, [The Balance of the Market Grain Supply], *Statisticheskoe Obozrenie*, 5:37 (May 1930).

⁶⁴ See A. Gaister, [The Leasing of Land], *Na Agrarnom Fronte*, 6:30-55 (June 1927); A. Azizian, [The Characteristics of Farms Leasing and Renting Land], *ibid.*, 10:37-52 (October 1927).

Another important factor which adversely influenced agricultural production, particularly for the market, was the unfavorable relationship between the prices of agricultural and industrial products, or, as it was often termed the "scissors." For the sake of brevity, this term will be used henceforth to designate price disparity. Let us consider a few examples.

During 1925-26 to 1927-28, the prices paid by the Government, which purchased a large share of the farmers' commercial output, were less than 50 percent above the pre-war level; while retail prices for manufactured goods in State and cooperative stores were doubled, and in private stores were even higher.⁶⁵ According to special indices of the farmers' purchasing power, a bushel of wheat in the important export regions of Southern Ukraine and North Caucasus could buy, in 1926-27, only about 60 percent of the manufactured goods which it bought in 1913. In one village in the former Samara Province of the Volga region, peasants, questioned by Soviet investigators, pointed out that before the war a pood (36 pounds) of sugar cost 6 rubles and a pood of wheat sold for 1 ruble; while, in 1927, the prices were respectively 12 rubles and 0.8 rubles.⁶⁶ Similar figures are given for other manufactured goods.

In the sense of an unfavorable relationship between agricultural and industrial prices, "scissors" have been a familiar phenomenon in most capitalistic countries since the post-war deflation in the twenties. It is curious that the same problem, in an exaggerated form, appeared in the Soviet Union, where the State owned and operated all large-scale industry, had a complete monopoly of foreign trade, and increasingly dominated, through its procuring organizations, the domestic market for

⁶⁵ In the field of retail trade as well as in marketing of agricultural products the NEP period witnessed the coexistence of two systems with separate, though not unrelated, price structures: the so-called "socialist sector," which comprised the state and cooperative trading organizations, with prices fixed in accordance with Government policy; and private trade with usually higher prices determined by market conditions of supply and demand. The "socialist sector," however, backed by the State, was rapidly displacing private trade which was discriminated against in the matter of taxation, credit, transportation, supplies of goods by the state industry, etc.

⁶⁶ I. Veremichiev, A. Gaister, and G. Raevich, *710 Khozaistv Samarskoi Der-evni* [710 Farms of Samara Villages], 20 (Moscow, 1928).

agricultural products, thus displacing private trade. However, Soviet price "scissors" had one highly important peculiarity not to be found elsewhere. They were accompanied by the so-called "goods famine" or physical shortage of manufactured goods and also by their poor quality compared with pre-war Russian standards.

This chronic goods shortage, which has constituted one of the most serious problems of Soviet economic life, was not fully reflected in rising prices, since the latter were fixed by the Government over a wide area of industry and trade, and in the twenties it was the policy to reduce rather than increase price disparity. Although it would lead us too far afield to discuss the causes of this interesting phenomenon, it may be noted in passing that, since strong emphasis was placed on production and import of capital goods by the Government, and the nationalized industry was far from efficient, the supply of consumers goods did not keep pace with the effective demand.

As a result, the peasants were often unable to buy manufactured goods or had to pay exceedingly high prices and, consequently, they had no incentive to produce for the market. Thus, the "scissors" accentuated the tendency toward self-sufficiency to which the small size of the farm-unit made post-war Russian agriculture so susceptible. This was particularly true in the case of cereals, which fared worse than other agricultural products because of the price policy aiming to stimulate production in intensive branches of agriculture. In 1925-26, the index of procuring prices for cereals was 137.5, for industrial crops, 138.3, and 159.8 for livestock and dairy products, using 1909-13 as 100. In the 1926-27 season the index was 108 for cereals, 135.4 for industrial crops, and 171.5 for livestock products. It is not surprising that this situation tended to depress rather than stimulate commercial grain production, even though its expansion was urgently dictated by the rapid growth of population and by the Government's export policy.

DECLINE OF THE NEP

The relatively liberal attitude of the Soviet Government toward individual peasant farming, which reached its zenith in

1925, was practically repudiated by the end of 1927. This repudiation was preceded by a bitter controversy within the Bolshevik Party in which the fundamental tenets of Soviet economic and agrarian policy were put to an acid test. The basic question of principle and policy which underlay this controversy, apart from its numerous purely factional or personal aspects, was the future of socialism in the Soviet Union. Although this question has many ramifications, the present discussion must be limited to the aspects which had a bearing on the Government's agricultural policy.

The Russian economic system of the NEP period presented a dichotomy of socialist and capitalist elements in a condition of rather unstable equilibrium. This dualism did not greatly matter in the early years of the NEP when the urgent need was a breathing spell and the recovery of production after the catastrophic decline of the revolutionary years, but as the critical period passed, new difficulties appeared and new misgivings developed within the Bolshevik Party. These characteristically coincided with the fading of the prospects of a world revolution, which Lenin hoped would aid the Bolshevik cause in Russia.

It was feared that the partially restored capitalism would grow more rapidly and encircle the socialist elements in Russian national economy. In agriculture especially the resumption of the process of economic stratification of the peasantry into different layers of prosperity after the great levelling of the revolution caused much apprehension. A great deal of concern was manifested in Bolshevik circles over the so-called Kulak danger—the growth of a class of more prosperous peasants who, because they possessed livestock, implements, and other forms of capital, were considered in a position to exploit the peasants who had land but no means to cultivate it.

The existence of such a stratification in the village was generally admitted, but its extent and particularly its tendencies and trends were subjects of acrimonious debate. The so-called Left Opposition, which by 1926 included such prominent leaders as Trotsky, Kamenev, and Zinoviev, in accordance with the classical Marxian dogma, emphasized the development of extreme groups in the peasantry—the Kulaki and the poor peasants.

Although even the most prosperous peasants were very small producers, especially when judged by capitalistic standards, the Kulak spectre loomed large in the eyes of the Left Opposition which accepted as gospel Lenin's teaching that, "Small-scale production gives birth to capitalism and the bourgeoisie constantly, daily, hourly, elementally, and in vast proportions."⁶⁷ Moreover, the influence of the Kulaki on the rest of the peasantry was considered out of all proportion to their small number.⁶⁸

On the opposite side, there was a group in the Party, represented by equally prominent leaders such as Bukharin and Rykov, who minimized the Kulak danger and who, as already noted in the discussion of the 1925 legislation, welcomed the increasing prosperity of the peasants. Still further to the right was the brain trust of academic and professional economists like Professor D. N. Kondratiev who have long since fallen from favor. The latter saw some virtue in the growing economic stratification of the village due to the resulting acceleration of economic development in the country.⁶⁹

During 1925 to 1927, the Kremlin leadership, which gravitated more and more into the hands of Stalin after Lenin's death, tried to steer a middle course between the Scylla of the Left and Charybdis of the Right, inclining, however, much more to the latter. It did not deny the existence of the Kulak danger but minimized its seriousness, pointing out the occurrence of a general economic levelling upward of the whole peasantry, including the poor and, particularly, the so-called middle peasants, i.e.,

⁶⁷ Quoted by Leon Trotsky, *The Real Situation in Russia*, translated by Max Eastman, 60 (New York, 1928).

⁶⁸ How small the number of such Kulak farms could possibly be is indicated by the fact that, in so important an agricultural region as North Caucasus, for instance, the number of peasant holdings with four or more draft animals amounted, in 1926, to 4.8 percent of the total, in Crimea it was 6.9 percent; in all other European regions of the U.S.S.R. the proportion was less, and in the Central Black Soil area only a fraction of a percent. Holdings with a sown area of 10 dessiatines (27 acres) or over, accounted only in a very few regions for 10 percent or more of the total number of holdings and constituted a much smaller proportion in most regions.

⁶⁹ [Concerning the Question of Economic Stratification of the Village], *Puti Selskogo Khozaistva*, 5:123-140 (May 1927).

those of average prosperity. The latter constituted a new non-Marxist category in the official Bolshevik terminology introduced by Lenin who, even during the period of War Communism, repeatedly stressed the importance of keeping on good terms with them. However, the middle peasant came into greatest vogue with the NEP and the *smychka*. With the so-called "commanding heights" of economic life,—industry, transportation, credit, foreign trade, etc.,—in the hands of the socialist State, it was claimed by the official leadership that the process of stratification in the village would not take the same form as in the capitalist countries where it led to the erosion of the middle group and the creation of the two extremes, the proletariat at the bottom and the capitalist at the top. Under Soviet conditions, therefore, the middle peasant was, in Lenin's words, the "central figure" of agriculture and, according to the current official doctrine, was destined to remain in this rôle for a long time to come. The idea of some communists that economic stratification in the village called for the rekindling of class struggle was characterized by Stalin in 1925 as "empty chatter."⁷⁰

The most serious bone of contention in the intra-party debates, however, was the problem of industrialization which closely affected the agricultural policy of the Government. There was no disagreement in the Bolshevik Party as to the necessity of industrialization. In fact, there were objective economic premises in the agrarian overpopulation of the country for an active industrial policy, no matter who were the rulers of Russia, and it was actually pursued by the Imperial Government before the revolution.⁷¹ The agrarian overpopulation was accentuated by the movement of population from the cities to the village during the years of the revolution and the breakdown of industry and trade which formerly provided much temporary employment to

⁷⁰ Eden Paul and Cedar Paul, trs., *Leninism*, 1:247 (London, 1928).

⁷¹ In common with practically all students of the problem we view agrarian overpopulation not in an absolute but in a relative sense, relative i.e. to the prevailing system of agriculture. Cf. Timoshenko, *Agricultural Russia and the Wheat Problem*, 30.

the peasants, especially in the northern and north-central provinces with less fertile soil. Industrialization, it was believed, would not only relieve the village of surplus labor but, by expanding the urban market, would also tend to stimulate the intensification of Russian farming and thus increase the opportunity for the application of labor in agriculture. This policy was also dictated by military and political motives and by the whole philosophy of Marxian socialism, as modern technology was considered the base and the factory worker the spearhead of socialism. According to Lenin, each new factory was "a new stronghold" of the working class, strengthening its position in the national economy.

There was, however, considerable disagreement among the Bolsheviks with respect to the tempo of industrialization. The Left Opposition advocated the utmost speed in order to strengthen the socialist elements in Russian national economy and overcome the disparity between industry and agriculture. It was, in no small measure, because the progress of industrialization was considered inadequate that the Opposition manifested such jumpiness with respect to the Kulak danger.⁷² That the necessary capital resources for such a process of industrial development would have to come largely from agriculture, i.e., from the peasant, was recognized, since foreign capital which played so germinal a rôle in the industrialization of pre-war Russia was unavailable. Consequently, the Left Opposition was in favor of higher taxation for the more prosperous peasants and of relatively high prices for industrial products, which would make possible larger accumulation of capital in industry. "First, the accumulation of capital, on the basis of it—lowering of production costs and then reduction of prices," wrote E. A. Preobrajenskii, the chief theoretician of the Left Opposition.⁷³

⁷² See Trotsky's speech at the XV Party Conference, Nov. 1, 1926, *XV Konferentsiia Vsesoiuznoi Kommunisticheskoi Partii . . . Stenograficheskii Otchet*, 506 (Moscow, 1927).

⁷³ "Ekonomicheskie Zametki," *Bolshevik*, 15-16 (Aug. 31, 1926). See also his *Novaia Ekonomika* (ed. 2. Moscow, 1926). Particularly important is the celebrated second chapter on "The Law of Original Socialist Accumulation" which first appeared separately in 1924 and is the *locus classicus* of the doctrine of

The Leftists believed that the peasants could bear such a burden and were against humoring them, especially when it was a matter of carrying out the economic program of the Government. Thus, when plans for collection and export of grain miscarried in 1925, Kamenev, at the XIV Party Congress, complained bitterly that, "The peasantry is tying our hands in the matter of expansion and reconstruction of our industry."⁷⁴

On the other hand, the official Party leadership and an overwhelming majority of the economists and statisticians realized the grave threat which this course carried to that *smychka* or alliance between the village and the town which Soviet leaders declared, on innumerable occasions, was to constitute the keystone of the NEP. It was actually an attempt to cure "scissors" by a stronger dose of "scissors," but the Kremlin and its economic brain trust understood very well that its immediate adverse effect on the peasants' production would gravely imperil the very cause for which it was prescribed. As the XV Party Conference in the autumn of 1926 pointed out in its official resolutions: "The way of viewing the peasantry merely as an object of taxation in order to extract more resources from peasant agriculture by means of excessive taxes and high factory prices must inevitably arrest the development of productive forces in the village, decrease the marketability of agricultural products, and threaten a breakdown of the alliance between the working class and the peasantry—thus endangering the task of building socialism."

Nevertheless, the bitter intra-party struggle and the clamor of the Trotskyist Opposition about the Kulak danger began to have its effect on the agrarian policy of the Soviet Government. The much narrower interpretation of the electoral law in 1926 which was adverse to the suffrage of many prosperous peasants, the more frequent official pronouncements against the Kulaki, and the general drive against private trade were harbingers of the approaching change. The relatively favorable attitude of the

extracting capital for industrialization by "squeezing" the peasant. A supplement to the second edition of the work contains a reply of the author to Bukharin and other critics. Cf. Dobb, *Russian Economic Development*, 260-268.

⁷⁴ *Ekonomicheskaja Zhizn*, Dec. 29, 1925.

Government toward individual peasant farming was waning, and by the end of 1927, only a year after it had been reaffirmed by the XV Party Conference, it had practically disappeared.

THE NEW OFFENSIVE

A serious modification of the official policy was first announced in October 1927 in the proposals of the governing Party organs prepared for the approaching XV Party Congress. These proposals called for the resumption of a "more decisive offensive against the Kulaki" and for a number of new measures "limiting the development of capitalism in the village and leading peasant farming in the direction of socialism." It was held that "the basic problem of the Party in the village" was that of "combining and transforming small individual peasant farming into large collectives." The proposed new course of agrarian policy was approved by the XV Party Congress in December 1927. This was the same Congress which excommunicated Trotsky and his followers and brought Stalin a step nearer to the unrivalled domination of the Party. The striking resemblance, therefore, of the official Party resolutions quoted above to the platform of the Opposition adopted in September 1927 is certainly significant. The Opposition demanded that: "The growth of private proprietorship in the country must be offset by a more rapid development of collective farming. It is necessary systematically and from year to year to subsidize the efforts of the poor peasants to organize in collectives. . . . The task of the Party in relation to the growing Kulak class ought to consist in the all-sided limitation of their efforts at exploitation."⁷⁵ Paradoxically, the views of the Left Opposition on agrarian policy were beginning to prevail just as it was being read out of the Party.

Each period of Soviet agrarian policy, as we have seen, had its characteristic legal counterpart in some basic land legislation. The new tendencies of agrarian policy approved by the XV Party Congress at the end of 1927 also received legal expression in new fundamental land legislation promulgated on December 15, 1928.⁷⁶ .

⁷⁵ Trotsky, *The Real Situation in Russia*, 68-69.

⁷⁶ For an analysis of this law, see Auhagen, "Die Neueste Russische Agrargesetzgebung," 193.

The salient features of the new law were the frankly discriminatory treatment of the Kulaki—a term not even employed in the law of 1922; the preferential status of collectives and the poorer peasants in all matters; the more restrictive attitude toward the leasing of land and employment of hired labor, reversing the liberal attitude of 1925–26; and the practical banning of the more individualistic segregated peasant farms, *otrub* or *khutor*, the organization of which was discouraged and entirely prohibited when it led to the development of the Kulak type of farming. The control of the land commune over its members was strengthened while it, in turn, was subjected to greater supervision by the political village soviets. To deprive the Kulaki of their influence in the land commune, they were divested of voting rights in the latter, and such rights were granted only to those eligible to vote in Soviet elections.

The law of December 15, 1928, is primarily important as a historical landmark, indicating the long distance travelled by the Kremlin policy from the objectives of only some two years ago, when strengthening of individual peasant farming was the acknowledged aim. In another year this law and even the first Five-Year Plan officially approved a few months later, were forgotten in the sweeping tide of wholesale collectivization of Russian peasant agriculture and the "liquidation of the Kulaki as a class."

Not only the land policy but the instrument of taxation, which in the U.S.S.R. has always been employed for socio-economic and class ends, was used increasingly against peasant individualism. The "single agricultural tax," so-called because it was the only direct tax levied by the Central Government in the village, was revised in accordance with the instructions of the XV Party Congress to yield 25 percent more revenue in 1928–29. As it was intended to place this increased burden primarily on the upper strata of the peasantry, the progression of the tax was made more steep. This, however, was not all; the use of an additional so-called "individual" method of assessment was permitted in the case of the Kulaki, ostensibly to prevent evasion but actually to serve as an important weapon in the struggle against the latter. However, the Soviet leaders later admitted

that "individual" assessment was often greatly abused and applied not only to the Kulaki but to the middle peasants, which is not surprising in view of the elusive line of demarcation between the two.⁷⁷

It is uncertain how far and how fast the drive inaugurated in the autumn of 1927 would have proceeded had it not been for the fact that just as the new anti-individualistic slant of agrarian policy was announced by the Kremlin, the country found itself in the throes of a serious grain crisis. Procurements of grain by the Government from the smaller 1927 crop, which was at first overestimated, were running dangerously below the preceding year, while the responsibilities of the State for the supply of the towns and deficit rural regions increased with the suppression of private grain trade. Thus, ideological motives which had dominated the decisions of the Kremlin in the autumn of 1927 were soon reinforced by the threat of hunger.

The crisis was partly the result of a smaller grain crop, but, more fundamentally, it was a consequence of the inadequate development of small peasant agriculture in the light of the requirements which the growing population, industrialization, and export policies of the Government placed upon it. The factors which were largely responsible for this inadequate development, such as the excessive division of peasant farming, the price "scissors," and shortage of manufactured goods had already been discussed. It was also mentioned that the very policy of industrialization, by emphasizing the development of heavy industries producing capital goods, tended to create a shortage of consumers' goods which reacted adversely on peasant production. Now that it was faced with a serious procuring crisis and the urgent need of averting famine in the cities, the Government resorted, as it had ten years earlier, to force. Accompanied by an outcry against the "Kulaki speculators" in the controlled press, the Bolsheviks proceeded during the early months of 1928 to extract grain from the recalcitrant

⁷⁷ See Kalinin's report at the XVI Party Conference, *Ekonomicheskaja Zhizn*, Apr. 30, 1929; also [Agricultural Tax] *Biulleten Ekonomicheskogo Kabineta Prof. S. N. Prokopovicha*, 5:58 (May 1928).

peasants by tactics made familiar during the period of War Communism.

The peasants reciprocated in kind and a tug of war developed. Thus, early in 1928, the picture of the abandonment of the NEP, as far as the village was concerned, seemed to be fairly complete. It is true that in the spring of that year, when the immediate grain difficulties were over, the coercive measures used were officially characterized as temporary or "extraordinary." The Kremlin even condemned what were now declared to be "aberrations" or "perversions" of the Party line in dealing with peasants,⁷⁸ but in spite of these declarations, the grain front, after 1928, became for a number of years the principal theater of war in the countryside. As the recently executed Commissar of Agriculture M. Chernov put it, "Grain procurements form the principal arena in which the struggle of the Kulaki against the socialist reconstruction of the country developed."⁷⁹

The net result of the new Government policies regarding land, taxation, and marketing was that the individual peasant farmer found himself in a cul-de-sac. There was no incentive or possibility for growing along individualistic lines, and it is not surprising that under such conditions the peasants even began to curtail their production. The total grain acreage, which was increasing until 1928, actually decreased 2.6 percent in that year. The combined acreage under wheat and rye, the two principal bread grains, declined 11 percent, thus wiping out the gains made after 1925; and this in the face of bread lines in the cities. It is true that the acreage reduction was due in part to unfavorable weather conditions, but that the latter was not the sole cause is clear from the diametrically opposite behavior of the different layers of the peasantry. The more prosperous peasants, who were particularly subject to the various pressures described above, were reducing their acreage, while the poorer peasants encouraged by the State tended to increase their sow-

⁷⁸ Resolution of the joint session of the Central Committee and the Central Control Commission, *VKP (b) v Resoliutsiiach*, 2:459.

⁷⁹ [The Basic Questions of New Grain Procurements], *Ekonomicheskoe Obozrenie*, 7:3 (July 1929).

ings.⁸⁰ The fact that it was primarily the economically strong farmers, who ordinarily produced surplus grain for the market, that were curtailing production was bound to aggravate still further the difficult market situation.

The unsatisfactory agricultural conditions, which continued in 1929, were viewed with alarm within the Bolshevik Party itself, this time by the Right Wing which had helped Stalin in his fight with the Trotsky Opposition and which included such prominent personalities as Bukharin, Rykov, and Frumkin. There was talk in Party circles of "degradation" of Russian agriculture under the influence of the new Government policies. The Right Opposition, however, was broken in 1929 by Stalin, just as the Trotsky or Left Opposition was crushed two years earlier.

On this occasion, the Government policy did not veer to the right as it had to the left in 1927. There was to be no reversal of the new Leftist policies, no retreat, not even an application of the brakes. Stalin indicated this clearly with respect to industrialization which, as we have seen, was largely at the root of the "scissors" or disparities between agriculture and industry. Discussing the difficulties on the grain front in May 1928, he said: "To diminish the speed of development of industry would mean weakening the working class. . . . On the contrary, we must maintain the present rate of development of industry and, at the first opportunity, still more accelerate it, in order to pour cheap goods into the rural districts and obtain from them the maximum amount of grain . . . and in order to industrialize agriculture and to increase its marketable surplus. . . . Perhaps it would be wise, as a measure of greater 'caution,' to retard the development of heavy industry, with the object of making light industry, which produces chiefly for the peasant market, the basis of our industry. Not by any means. That would be suicidal. It would mean undermining our whole industry, including light industry. It would mean abandoning the slogan of the industrialization

⁸⁰ See N. M. Vishnevskii, [Agricultural Production in 1928-29], *ibid.*, 12:101-102 (December 1928); [Agricultural Production in 1929-30], *ibid.*, 10:99-106 (October 1929).

of our country and transforming it into an appendage of the capitalist system of production."⁸¹

The persistence of the Kremlin on policies requiring a maximum of agricultural output in the face of a crisis of agricultural under-production, and a bitter struggle in the village caused by these very policies, spelled with the inexorableness of a Greek tragedy the doom of individualism in Russian agriculture. And very soon indeed the small peasant cultivator who had successfully resisted War Communism in 1918-1921 was forced into a collective cast of what W. H. Chamberlin aptly called "The Iron Age of Soviet Russia."⁸²

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⁸¹ *Leninism*, 2:108-109.

⁸² For a detailed discussion of this period of Soviet agrarian policy, see Lazar Volin, "Agrarian Collectivism in the Soviet Union," *Journal of Political Economy*, 45:606-633, 759-788 (October, December 1937).

THE HISTORIC CIVILIZATION OF THE SOUTH¹

A story is told that one Rastus, a slave, heard a "call to preach," and when he applied for a license was required to tell the parable of the Good Samaritan. This is what he told:

Once upon a time a man came down from Jerico to Jerus'lem an' fell 'mong thieves; an' de thorns sprung up an' choked 'im; an' he went on an' he did'n' have no money, an' he met de Queen o' Sheeby, an' she give him a hun'erd talents o' silber an' ten changes o' raiment; an' he got in de chariot an' drove off; an' while he was drivin' thoo de woods his hair got caught on a limb an' he hung dar many days an' many nights, an' de ravens brung him vittles for to eat an' water for to drink; an' one night whiles he wuz hangin' dar his wife Delilah cum along an' cut off his hair, an' he fell 'pon stony groun'; an' he went on an' hid hissef in a cave, an' it rained forty days an' forty nights; an' he went on an' he went on, an' he met up wid a man, an' the man said cum in an' have sump'n to eat wid me; an' he said no I can't, I's mar'd a wife, wharfo' I can't cum; an' he went out in de highways an' de byways an' made dat man cum in an' eat wid him.

When he went on an' cum to Jerus'lem he saw Jesebel dar, a sett'n up high in a winduh, an' when she saw him she laffed at him; an' he sed th'ow her down out o' dar; an' dey th'owed her down out o' dar; and he sed th'ow her down sum mo'; an' dey th'owed her down sebenty times seben; an' o' de fragments dey took up twelve baskets.

If we may take this tale at its face value, it may symbolize matters of which Rastus was not quite aware. It is a jumble of episodes from Holy Writ, each one remarkably compressed—a thing of shreds and patches, of bits heard by an illiterate, treasured in his memory, and assembled in good faith. On the other

¹ This address was presented at a joint meeting of the Farmers' Institute and the Institute of Rural Affairs at Virginia Polytechnic Institute, Blacksburg, on the evening of July 28, 1931. The manuscript was found in the files of the Extension Division of Virginia Polytechnic Institute through the auspices of Mr. Ralph M. Brown, the librarian, and it is here printed for the first time with the permission of President Julian A. Burruss and Mrs. U. B. Phillips. The programs of the occasion used the title, "Antecedents of the Present Southern Rural Civilization." Attached to the manuscript is a letter by Professor Phillips which states that it is "the substance" of his address and that "it will be expanded somewhat in delivery." A summary appeared in the *Roanoke Times* for July 29, 1931.—*Editor*.

hand it has no trace of African paganism, but is wholly derived from Christian intercourse in America. Rastus was altogether a child of the New World—a step-child if you will, but with nothing but a biological connection with the Dark Continent. A million of his kind might have given a million such versions of Scripture, or of the Federal Constitution, in unconscious parody. It is at once comic and serious, and so also are many other things in human history.

I recently made a visit to central Africa, led by a desire to see the life of Negroes in their native land. In the main I knew beforehand what the sights would be; yet in a sense it was incredible—and it remains marvelous—that in the twentieth century millions of mankind live almost or quite without clothing or commerce. They hunt without guns, they build without hammers, they till without plows, they travel and carry without beasts or vehicles, they sleep without beds, and they eat without forks. These things are vivid to the wayfarer's view. In addition, they believe without Confucius, Buddha, Christ, or Mohammed, and they dispense with clocks and calendars, alphabets and writing. In doing without the world's apparatus they feel no loss, for they know not of it. If one chances to see a motor car, a book, or a camera, he has no more impulse to master it than I have to hop the Atlantic or grasp the details of relativity. To Lindbergh or Einstein I am a sluggish fellow; to me the tribal Negro is a sluggish fellow not alert for achievement. Yet he and I and Einstein doubtless have our different ambitions and are zealous in pursuit of them. The tribal Negro, so primitive as to be styled a savage, merely dwells in a world of his own, with crafts and conceptions outgrown by most other men.

It is a very strange thing that from this tribal African life multitudes were torn and shipped as merchandise across the broad Atlantic. They were wanted not for their beauty, their brains, or their bravery, but for their brawn alone, as an aid in wringing profits from a wilderness. Slaves without prospect of release, they were driven as cattle. The trade was a thoroughly brutal business. Curiously, the consequence was mostly not brutal.

Negro slaves were not commercially wanted in all parts of America, but only where the needed work might be set in very simple continuous tasks. This meant the districts where certain staple crops could be produced by crude labor under supervision. In these a plantation system was devised into which the Negroes were fitted as gently as might be. The newcomers found even the simple precepts hard to grasp, for their masters' language was not theirs, and all methods of civilized life and work were unfamiliar. But their children and their children's children, having no memory of African scenes or tribal ways or Negro languages, cheerfully made American plantation life their own, for the most part accepting slavery as a matter of course and adopting their masters much as a child appropriates his parents or a pupil his teacher. This mutuality was the swifter and stronger in growth because white children had black nurses and playmates; and when grown to maturity they could never look upon "their" Negroes as mere chattels, whatever the law might say. A plantation, in fact, was a home of very diverse human beings, brought up in an isolated group with a prospect of lifelong relationship one with another, each with all. It was a small and closely knit community, every member knowing the traits and habits of every other, and each more or less conscious that his own peace and comfort would depend upon the good will and esteem, or at least the tolerance, of the rest.

This pattern of life did not permit the masters to remain mere Englishmen or Frenchmen, any more than it permitted the Negroes to remain Africans. It put a new impress upon all and sundry, producing new types and the rudiments of new philosophies. The blacks were in a degree civilized and Christianized whether they would or no; the whites found their servants often engagingly responsive and found themselves vested with all the responsibility which goes with power over subordinates. As one of the many paradoxes of history, many a slave acquired pride and self-respect, and many a master and mistress was mellowed by the very harshness of the law which gave them privilege. The slaves in their service must be fed, clothed and sheltered, sanitated at all times, nursed when ill, cheered when

down-hearted, spurred when indolent, disciplined when unruly. The gamut of administrative concern was endless, and the need of attention constant. The scheme of life was a steady challenge to resourcefulness, moderation, and wisdom. It was a school of responsibility, which as a settled order bred a code of morals, a set of manners, and a sense of dignity blended with patronage and good humor. To some people it proved irksome; but many more could spontaneously sing:

All I want in this creation
Is a pretty little wife and a big plantation.

The pattern of plantations was not uniform throughout the South. The system had separate origins in Virginia, South Carolina, and Louisiana, and it was modified as it spread inland from the seaboard. There was difference in crops and routine, difference in organization and personal adjustments, and difference in endless details. Yet an identity of basic problems and a considerable interchange of ideas gave plantations a certain likeness wherever they were found. Particularly in the nineteenth century there was much discussion in print as to the best methods of handling labor as well as crops, livestock, and supplies. By reason of their scale of operations planters had much to gain from improvements in seed, fertilizers, implements, and industrial morale; and no one knew this better than they. The more one studies their copious records the stronger the respect one feels for their standards, their conduct, and their way of life.

In all quarters of the South dwelt many white families who were not plantation owners. Many of these had from one to a dozen slaves as help in their farm and household work; still more had no slaves at all. Part of these dwelt in the tobacco and cotton districts, drawing their livelihood from the production of the staples. Others dwelt in the mountain districts or in the great valleys amid the mountains, producing their own bread and meat and selling any surplus of cattle, grain, or whiskey. These people or their forbearers had mostly come from England, Ireland, or Germany through Pennsylvania and migrated southward behind and between the plantation districts. They had little contact at any time with Negroes or slavery. They

were no longer English, German, or Scotch-Irish; they were not Pennsylvanians, and not Southerners of the black-belt sort. Speaking as I now do within that area and to an audience which is its very sinew, I can merely say that it has and has always had plenty of sinew which in its variations yet awaits full description and analysis. My present concern is merely to remark that people of the mountains and valleys, having a negligible number of Negroes among them, were largely free of the pressure of that problem of race which so strongly affected all the rest of the South. With one accord they deplored the conflict of the sixties; and when it was forced upon them, their accord was for the time being destroyed. Some gave their loyalty to the Confederate cause; others adhered staunchly to the Union; still others quite rationally declined to take arms against their brothers on either side. Believing as I do that the war was not an irrepressible conflict, but a fruit of excessive and misguided zeal by fervid partisans of the North and the South, I certainly cannot censure those who stood apart from the carnage. Within the black belts and on their fringes personal neutrality was not so feasible because white supremacy seemed in peril; and white supremacy was a universal watchword. The alternative was considered industrial paralysis and social chaos, Africanization and enslavement. When slavery was attacked, it was defended as an indispensable safeguard of civilization under the circumstances.

Now there were several fallacies in all this. First, the Negroes, long since broken from their tribal stem and habituated to life in white man's America, would not have known how to create an African order of life if they had wanted to do so. Second, slavery was not essential to security against Negro domination. The course of history since emancipation shows this; and contemplation of the numerousness and the talents of the whites might well have given assurance beforehand. Third, in spite of the noisiness and fervor of abolitionists, the great bulk of the Northern people were either indifferent or hostile to their program and were strongly disposed to remain so unless a sectional stroke in defense of slavery should imperil the national authority. There were equally cogent errors on the Northern

side which need not here be discussed. We are concerned with Southern civilization and its cherishing.

Civilization everywhere is a delicate and complex fabric, a product of age-long weaving and alteration, and curiously it never is wrought according to pattern. Many patterns are devised, it is true. Sometimes one follows another with bewildering speed, as in Soviet Russia, but they never function as intended—not even the Volstead law—because the planners never grasp enough of the human conditions and human obstreperous nature to provide for essential details in advance. A wholesome social order is far less likely to result from deliberate invention than from informal trial and error and trial again by ten thousand individuals, each living a customary life but departing in some detail from the prevailing custom and setting an example which some of his neighbors follow.

Sometimes a very new state of things arises which requires new legislation. The tremendous change brought about by motor vehicles illustrates this. The nineteenth century had no traffic laws; the twentieth cannot do its business or pursue its pleasures without them. Some rules are nothing more than the fixing of a choice between the right hand and the left. In England, for example, all traffic moves to the left; in nearly all the rest of the world it goes to the right. Some rule is necessary; the choice doesn't matter. But when legislation imposes a drastic change in social adjustments, it is likely to prove a quack remedy for a real or fancied ill. It brings confusion, dislocation, and disorder. But order, the product of custom, religion, and law, is essential to security, serenity, and harmonious life. "Times that try men's souls" may be well enough once in a while; but in such times the test itself is largely the keeping and planning of order in the midst of distress.

Where two races of men live in a single community the problems of justice, equity, and authority are far more difficult than among a homogeneous people; and if a social order once established meets the general approval of those who dwell therein, it is likely to win unusually strong endorsement as against any projects of radical change. The whites of the South have been

conscious of this for many generations. Accordingly they have been conservative in policy, preferring to hold fast to things which were good rather than to seek those which were new, or perhaps to suffer the ills they had rather than fly to those they knew not of. It was and must be "a white man's country," a land of civilized order controlled by those whose enlightenment and capacity were assured. The Negroes were esteemed as an economic asset—they had been bought and paid for as such, and many of them were esteemed with great warmth on other grounds. Here is an old epitaph from a Charleston slab, eloquent of its composer as well as of its subject:

John:
A Faithful Servant
And True Friend:
Kindly and Considerate:
Loyal and Affectionate:
The Family He Served
Honours Him in Death
But, in Life, they Gave Him Love:
For He Was One of Them.

John's name was legion, and the name of his master and mistress likewise. How then could the master, and a legion of masters, be fearful of John or a legion of Johns? An answer is not far to seek. Slavery bracketed master and servant, white and black, putting each in his place, the one above, and the other below. Had not John served "the family" he could not have been "one of them." Slavery, in other words, offset and overslaughed antipathy of race, and in happy cases brought intense affection. As to John personally his master's family would have confidence in his faithful friendship throughout his life whether he remained a slave or became free, provided the process of emancipation was individual and did not affect a multitude of other Negroes in such a way as to give the whole body of blacks a real or fancied interest hostile to the whites. Furthermore, John was representative of a special type of Negro rather than of Negroes at large. It is characteristic of Southerners in the plantation tradition that they disesteem Negroes in the mass while esteeming them individually, whereas the rest of the

world is inclined to dislike them individually while tending to champion their cause in the mass.

All this is natural enough to one who has lived alternately South and North, as I have in Georgia, New York, Wisconsin, Louisiana, Michigan, and Connecticut. I am a somewhat denatured Southerner. For example, I like to have Negro students in my college classes. In fact I consider that Southerners are standing in their own light when they refuse to teach in Negro schools. For the best interests of their own social order it were better for them to train the Negro youth—"to catch them young and bring them up in the way they should go." Aforetime plantation mistresses and masters did this, and it might well be beneath no one's dignity now. Perhaps, when thus explained, my view is more conservative than radical, and in other matters likewise.

Without deploring the abolition of slavery, I do lament the gulf which has come between the better elements of the two races, and should like to see it in some way bridged. Well-informed and thoughtful Negroes of our time have no purpose of wrecking civilization. There are no Gandhis among them preaching non-coöperation and reversion to primitive ways. They have no love of tribal superstition or savagery; their ambition for themselves and their people is very much the same as yours and mine. They should be commended, never abused.

The Negroes in the mass are somewhat another matter. Many of the lowliest are not without likeable and admirable traits; but most of them have yet to show, indeed yet to begin to suggest, that they can be taken into full fellowship of any sort in a democratic civilized order. Their cousins in Africa demonstrate a wonderful capacity to remain primitive,—to perpetuate the crudest of human beliefs and practices. If most of these cousins in America had an effective suffrage, they could not use it with intelligence or to good effect. Such great disaster might not come as did come in the tragic period of "Reconstruction," but the white community will not assume the risk, and no one of knowledge and calm reason advocates it.

The civilization of the Old South was wholesome. It has now

changed, is changing, and will continue to change, though without a "five-year plan" or any other prescription. Yet in essentials it has persisted through fair times and foul, and will persist. Its tradition of kindness, hospitality, honesty, moderation, and good humor is a precious possession, to be cherished and spread abroad.

ULRICH B. PHILLIPS

THE "FATHER" OF THE LAND-GRANT COLLEGE

There is no more conclusive evidence of the secure establishment and wide approval of a law or of an institution than an active and prolonged dispute as to authorship and origin. At least five cities in as many States have continued through triumphs and vicissitudes to claim the birthplace of the Republican Party, and its alleged fathers are so numerous and widely scattered that when in recent years a wholly fictitious progenitor was foisted by a humorous college publication the present party leaders accepted the claimant without a protest. To the contemporary Know-Nothings and their successors, however, there is no monument or tablet and no proud descendants or gushing biographers to register or vindicate priority of leadership. The homestead, the composite antitrust law, the internal revenue system, the federal reserve act, and the various conservation measures have all been the subject of no little reminiscent and biographical controversy, while the graduation fiasco, the unhappy force bill, and the shifty concessions to inflation are assumed to have "just growed." High on the legislative honor roll have ranked the various laws for industrial education and research enacted since 1862. Whatever the true authorship and whatever the real influences in adoption, there has been no lack of aspiring statesmen to dignify the measures with their names—an indication of a zeal to "do something," not too inconvenient, for agricultural constituencies, as well as of the good standing of this type of education.

It is indeed a rare tribute to the success of the land-grant college, in popular estimation no less than in professional judgment, that, since the full establishment in the first decade of the present century, there should have arisen a rather heated controversy among leading educators regarding the institution's true paternity. While various States, within the family circle of college histories, have put forward, more or less qualifiedly,

their particular claimants, the main rivalry has been a dual one, and appropriately enough in view of traditional alignments, between leaders of New England and the Middle West—Vermont versus Illinois. No less appropriately for an issue over this type of college, both the principals were natives of New England, the home of the land-grant endowment idea which Manasseh Cutler and his associates had transferred to the West.

Justin Smith Morrill had signal advantage over most legislative godfathers, both in unprecedentedly long service and in continuous and cumulative demand for supplemental acts. In his secure position as party leader from Grant to McKinley and with the ever-present need for increased and extended Federal aid, presidents and boards of colleges established or aided by the law bearing his name were only too willing to acknowledge his claims to educational as well as political primacy. In resolutions inviting the Senator to sit for a portrait, the Cornell trustees referred to "the great Congressional Act of 1862, which was originated, championed, and carried through Congress by the patriotism, foresight, and energy of the Honorable Justin S. Morrill," and at the subsequent unveiling, President Andrew D. White declared that in the struggle involved "a true statesman led the army of education."¹ On every possible occasion, White paid tribute to the learning and culture, as well as astuteness, of his influential friend.² The Massachusetts Agricultural College welcomed him to its twenty-fifth anniversary as one "to whose wise foresight and able presentation of the subject every agricultural college in the United States owes its existence."³

¹ *Proceedings at the Unveiling of the Portrait of the Honorable Justin S. Morrill, Senator of the United States from Vermont, at the Annual Commencement of Cornell University, June 20, 1883*, p. 3, 5 (Ithaca, 1884). The portrait in the university library has the caption, "author of the 'Morrill Bill of 1862' which in the midst of a war for the National Existence made Provision for Scientific, Literary, Industrial and Military Education in every State in the Union."

² White to Morrill, May 17, 1883, Oct. 28, 1887, May 20, 1896, and to Louise S. Swan, Oct. 3, 1910, in the Justin S. Morrill Papers (Manuscript Division, Library of Congress). Unless otherwise indicated, all letters cited in this article are in this collection. A. D. White made reference to the Senator's work in his *History of the Warfare of Science with Theology in Christendom* (New York and London, 1896), and thought seriously of including him in his study of *Seven Great Statesmen in the Warfare of Humanity with Unreason* (New York, 1910).

³ H. H. Goodell to Morrill, July 19, 1886.

In 1895 such prominent agricultural leaders as W. A. Henry of Wisconsin and E. W. Hilgard of California addressed the Senator as the progenitor of their colleges.⁴ Buildings were named for him; his portrait was hung conspicuously; and the Association of American Agricultural Colleges, after giving his bust the place of honor in its exhibit at the Columbian exposition, arranged for quantity reproductions for the various colleges.⁵ Immediately following Morrill's death in 1898, there was a considerable movement, apparently stimulated by his son, to have his birthday observed as a general founder's day.⁶

The academic offspring sought aid and advice constantly. His own State university appealed to him on everything from faculty appointments and dismissals to alumni drives.⁷ When seeking tax exemption, Columbian University, although outside the family circle, offered the plea that "the friends of colleges naturally look to you for the protection of their interests."⁸ As early as 1878, the Nebraska president queried: "was it the thought or intent of Congress to make it the duty of these Colleges to *compel* military drill of every student?"⁹ An Ohio history professor wanted a law to make the colleges depositories for Government publications.¹⁰ One president of a Negro college inquired anxiously if he was within the law in admitting young women, while others protested against discrimination in distribution of funds.¹¹ From the seventies onward leading administrators deferentially sought his aid for increased and better protected endowments.

⁴ Nov. 1, 14, 1895.

⁵ H. E. Alvord to Morrill, May 10, 1893, Jan. 19, 1895.

⁶ Reports to James S. Morrill from the leading land-grant colleges, April 1899, in the Morrill Papers. In 1901, one of the four names suggested to the Legislature by the regents of the Washington land-grant college was "The Justin Morrill College." E. A. Bryan, *Historical Sketch of the State College of Washington*, 256 (Pullman, 1928).

⁷ The Morrill papers have continuous correspondence from the latter sixties to the Senator's death; the larger portion with President Buckham concerns finances, curricula, faculty dissension, appointments and removals, and opposition from rival colleges and farmer organizations.

⁸ J. S. Welling to Morrill, Feb. 10, 1877.

⁹ E. B. Fairfield to Morrill, May 22, 1878.

¹⁰ G. W. Knight to Morrill, Dec. 7, 1886.

¹¹ J. O. Crosby to Morrill, Nov. 14, 1895; T. W. Chase to Morrill, Dec. 14, 1872, Dec. 16, 1880.

No wonder the elder statesman came to feel a sense of proprietorship, a jealousy of rival claims, and an impatience with opponents of the expanding achievements of a favorite act which as early as 1870 he had emphasized in a biographical sketch as foremost in his public record.¹² In the commencement address at Vermont in 1893 he observed somewhat testily that "critics possibly would concede that the author of an act of Congress, and its amendments, ought to know something of its meaning, and therefore could be trusted to give it a true interpretation."¹³

As the movement passed the experimental stage and the stronger colleges acquired a degree of self-assurance, consideration was given to origins and formative influences, and in personal memoranda and letters to friendly inquirers Morrill gave a version of land-grant history in no way dissuasive to his admirers.¹⁴ One of the most ardent of this group, President Atherton of Pennsylvania State College, in a memorial eulogy before the convention of the college association in 1900, asserted that the titular author was in truth the real deviser and founder.¹⁵

¹² Morrill to Louis Ashmeall, Feb. 28, 1870.

¹³ Justin S. Morrill, *The Land-Grant Colleges; An Address Delivered at the Eighty-Ninth Commencement of the University of Vermont and State Agricultural College, June 28, 1893*, p. 15 (Burlington, 1893). In the debate on the bill of 1890, Senator Gorman of Maryland referred to Morrill as "the distinguished father of this system of colleges." *Congressional Record*, 51 Congress, 1 Session, June 14, 1890, p. 6088.

¹⁴ Memorandum, probably made in 1874, in W. B. Parker, *The Life and Public Services of Justin Smith Morrill*, 262, 271 (Boston, 1924), and B. E. Powell, *Semi-Centennial History of the University of Illinois*, 1:523-524 (Urbana, 1918). The original has disappeared from the present collection of the Morrill Papers. Morrill to Harrison Howard, Dec. 8, 1885, in the Howard Papers at the Cornell University Library; W. T. Hewett to Morrill, Feb. 2, 1894, and Morrill to Hewett, Feb. 6, 1894, in the Morrill Papers. This statement to Hewett, the historian of Cornell University, was evidently prepared with great care; there are three copies with considerable revision in the Papers. Morrill placed much emphasis on his speeches of 1858, 1862, and 1890 as adequate evidence. See above correspondence and letter to E. F. Palmer, Sept. 4, 1896.

¹⁵ G. W. Atherton, "The Legislative Career of Justin S. Morrill," Association of American Agricultural Colleges and Experiment Stations, *Proceedings* (1900), 14:64-72. The address was also issued as a separate pamphlet. In his sketch of agricultural education for the Paris Exposition volume, President Dabney stated that the various acts for agricultural education had been "secured largely by his efforts extending over thirty years." N. M. Butler, ed., *Monographs on Education in the United States*, 2:611 (Albany, 1900).

The address, undocumented and resting largely upon assumption, was to be cited thereafter along with the Senator's memoranda as a definitive statement.

New England priority in the case of this as of most other institutions could not long go unchallenged. In 1907, at a meeting of the Society for the Promotion of Agricultural Science, Dean Eugene Davenport of the College of Agriculture at the University of Illinois propounded the "historical query" whether Jonathan Baldwin Turner formerly of Illinois College had not provided the ideas for the basic act. On the strength of the evidence that he had collected, the speaker felt that an affirmative answer should be given but agreed to withhold final decision until his researches were more complete.¹⁶ Two years later in the sketch of agricultural education for his cyclopedia, L. H. Bailey, after mentioning Turner's industrial university address of 1851, made this wholly unverified observation: "there are many reasons for supporting the position of his friends that this address and subsequent correspondence from Professor Turner constituted the chief inspiration of Senator Morrill in his famous Land-Grant bill of 1862."¹⁷

Meanwhile, President James of the University of Illinois was conducting an elaborate, if not wholly impartial, investigation in connection with a semicentennial project. The research was at first intrusted to his executive clerk, who manifested impartiality of purpose if not skill in weighing evidence by accepting completely and unreservedly the Morrill hypothesis and rejecting that of his State and university. A penciled memorandum, the Atherton address, and similar offers of proof—some of which were provided by the university and the State library of Vermont, both of which, as he naively reported, were "doing everything in their power to give Senator Morrill the credit that he so richly

¹⁶ "History of Collegiate Education in Agriculture," Society for the Promotion of Agricultural Science, *Proceedings*, 1907, p. 50-52; Davenport to James S. Morrill, June 8, 1907. At the National Agricultural Convention called by the Commissioner of Agriculture in 1872, Regent Gregory of the Illinois Industrial University presented the claim "that the earliest movement for the establishment of industrial schools and universities was made in the State of Illinois." *Senate Miscellaneous Document 164*, 42 Congress, 2 Session, p. 23 (1872).

¹⁷ *Cyclopedia of American Agriculture*, 4:409 (New York, 1909).

deserves"—established to his satisfaction "the fact that Senator Morrill was the real father of the land-grant act from its inception—that the idea in fact was his and his alone." He regretted deeply that Illinois and the Middle West generally should have done injustice to the Senator's service and pledged himself and, conditionally, his university to set the record straight.¹⁸

The chief clerk was convinced that his superior shared his view as to the untenableness of the Illinois claim, but he greatly underestimated the force of regional, State, and university pride in an expansionist period. Illinois as well as Vermont "authorities" could present a case. The official statement was not lacking in extension of claim or vigor of assertion. In a university bulletin James posted his "Thesis . . . that Jonathan B. Turner . . . was the real father of the so-called Morrill Act . . . and that he deserves the credit of having been the first to formulate clearly and definitely the plan of a national grant of land to each state in the Union for the promotion of education in agriculture and the mechanic arts, and of having inaugurated and continued to a successful issue the agitation that made possible the passage of the bill."¹⁹ Morrill's son doubtless felt that this tribute to his father's greatness was weakened by the conclusion that his achievement was in carrying on the pioneer work launched in Illinois, and after reading the pamphlet's argument, in line with the thesis, he may well have doubted the pledge to "see that Senator Morrill receives due credit for his participation in the great work."²⁰ Relatives may also have looked askance at James's assurance some years later when seeking access to the

¹⁸ D. W. Morton, "To the Relatives of Senator Morrill," July 1, 1908, to James S. Morrill, July 11, 20, Aug. 4, 8, Sept. 17, Oct. 8, 1908, and to G. W. Benedict, Burlington, Vt., Sept. 12, 1908; James S. Morrill to Morton, July 17, 1908. In his final letter to Morrill's son, Morton showed a trace of uncertainty, not having received an explanation of a local pamphlet that had been sent to him: "I wish to make no mistake in any statement that I make and would like to back it up with all the authority I can gather." He gave final assurance that he was "trying to bend every effort to bring out the true status of the case."

¹⁹ E. J. James, *The Origin of the Land Grant Act of 1862 (The So-called Morrill Act) and Some Account of its Author Jonathan B. Turner*, 7, 32 (Urbana, 1910).

²⁰ James to James S. Morrill, Apr. 8, 1910. Substantially the same statement is made in James, *Origin of the Land Grant Act of 1862*, p. 8.

Morrill papers, that the more facts found out about the act "the greater will be the credit to Senator Morrill."²¹

To provide documentary support of which there was an embarrassing lack, Turner's daughter published a biography supposedly including all available papers on the controversy.²² Unfortunately there proved to be surprisingly little on controverted points, with much that was irrelevant and certain portions that were curiously contradictory, but inconclusive and *ex parte* as much of the evidence is here and elsewhere, the thesis has been generally followed by Illinois historians as faithfully as that for Morrill by New Englanders.²³

More recent general discussions of the movement if not altogether impartial and unprejudiced have been more objective and temperate. A Carnegie Foundation study in 1917, while fully recognizing limitations to Morrill's contribution, found the Turner claims not supported by the evidence, and with that conclusion the official Morrill biographer thought the contention might rest as "it is not likely to be revived."²⁴ In that same year, 1924, a Bureau of Education bulletin left the issue open in the noncommittal statement that early experiments and increasing demand for technical training "made it possible for leaders like Jonathan B. Turner, of Illinois, and Senator Justin S. Morrill, of Vermont, to crystallize the growing sentiment into the passage of the Morrill Act."²⁵ Five years later, in his critical review of agricultural education, the director of the General Education Board showed a much greater appreciation for Morrill's contribution than the sister foundation and made no mention

²¹ James to Louise S. Swan, Feb. 29, 1916.

²² Mary Turner Carriel, *The Life of Jonathan Baldwin Turner* (privately printed, 1911).

²³ Powell, *Semi-Centennial History of the University of Illinois*, 1:120; A. C. Cole, *Era of the Civil War*, 245 (Chicago, 1922); C. H. Rammelkamp, *Illinois College*, 231-233 (n.p. 1928).

²⁴ I. L. Kandel, "Federal Aid for Vocational Education," Carnegie Foundation, *Bulletin 10*, p. 79 (New York, 1917); Parker, *Life and Public Services of Justin Smith Morrill*, 284.

²⁵ W. C. John, ed., "Land-Grant College Education, 1910-1920," U. S. Bureau of Education, *Bulletin 30* (1924), p. 2. Senator Morrill's portrait appears as the frontispiece.

of Turner.²⁶ Finally in 1929 the veteran agricultural administrator, Dr. A. C. True, in the most elaborate of his three historical bulletins, presented the evidence more fully than it had previously been given and, without rendering definite judgement, left the implications that neither of the claims was fully substantiated.²⁷

With the question at this stage, it is the special aim of this paper to inquire whether Morrill, Turner, or any other statesman, educator, or publicist rightly may be entitled to the honor of founder. Such an inquiry must be far wider than that concerning the Act of 1862, for, influential as that law was, it neither started nor established the present system of land-grant education. Statements regarding the cardinal importance of this act in the history of higher education, if well reasoned, must have reference not so much to the specific measure itself as to the spirit which it reflected and the matured achievement to which it markedly contributed. We are thus not so much concerned about the immediate responsibility for the particular enactment as with the evolution of the colleges as they now exist. In seeking an answer to the question it is necessary to consider the various stages through which these institutions have passed in reaching their established position in the Nation's educational system: the rise and growth of the industrial movement before 1862; the bills of 1857 and 1862; the influences in the acceptance and application of the Act by the States; and the determination and justification of field and scope—the fixing of the place in the academic sun and the consequent securing of Federal and State support to remain there.

²⁶ W. H. Shepardson, *Agricultural Education in the United States* (New York, 1929).

²⁷ A. C. True, *A History of Agricultural Education in the United States, 1785-1925*, p. 82-88, 91-99 (Washington, 1929). W. H. Jordan, in Paul Monroe's *Cyclopedia of Education*, 1:59 (New York, 1911), observed: "The exact relations between Professor Turner and . . . Morrill have never been definitely established, because much correspondence was burned during the Civil War, but it is known that they conferred." E. E. Slosson, in *The American Spirit in Education*, 164, 224 (New Haven, 1921), commented: "J. B. Turner . . . if not the father, was at least the furtherer of the Morrill Act." Milton Conover, *The Office of Experiment Stations*, 16-17 (Baltimore, 1924), places Turner and Partridge "in the forefront of those who would advance the agricultural idea."

The land-grant college was the outstanding, permanent achievement of the industrial movement in education which, starting in Europe, found greatest opportunity in a new land of exploitable resources and equalitarian traditions. The movement marked essentially an effort to bring instruction more into harmony with the rapidly changing economic and social order and to democratize technical education in consonance with the free school system of elementary education and the high school and State university at their levels. In practice it sought a direct application of the developing sciences to the new industries, with the main emphasis, in the days of the agricultural nation, upon the basic occupation. Following the early, largely nominal professorships of agriculture in eastern and southern universities, the premature proposals of farsighted innovators like Benjamin Franklin, Thomas Jefferson, Simeon DeWitt, DeWitt Clinton, Elkanah Watson, Amos Eaton, and Jesse Buel, and the ill-conceived, fantastic experiments with the Fellenberg manual-labor system, the agitation became more systematically and rationally organized in the late forties, when expanding markets were creating the need and the basic investigations of Lavosier, Davy, Boussingault, Liebig, Johnston, Dana, Norton, and Downing, along with the informational surveys at home and abroad of Henry Colman, the "Arthur Young of America," were providing the means.

The directing center of the movement was the great pioneer agency in all early improvement and advancement of farming, the agricultural society. These organizations developed leaders and provided the opportunities for leadership. The college movement, like the parallel ones for State and national organization, grew in proportion as the societies extended their programs and influence. Here were gradually brought together the social reformer with his zeal for improvement, the scientist with his needed information, and the teacher with his adaptive and interpretative powers.

In the decade and a half before the Civil War, numerous educators and social reformers, East and West, were in ways as varied as their contrasting conditions laying the bases of the new type

of collegiate instruction.²⁸ New England had a notable group of applied scientists and practical experimenters—in Connecticut, Benjamin Silliman Jr., John P. Norton, John A. Porter, and Samuel W. Johnson at Yale and G. W. and T. S. Gold at the Cream Hill School; in Massachusetts, Louis Agassiz at Harvard, Edward Hitchcock, J. A. Nash, and William S. Clark at Amherst, as well as the model farmers and organizers, Marshall P. Wilder and Henry F. French; in Maine, Ezekiel Holmes, teacher and editor and S. L. Goodale, organizer and writer. The historian of the Sheffield School has claimed that Norton and Porter laid the foundations of American agricultural education and that the Yale agricultural lectures of 1860 were a direct cause of the land-grant act.²⁹ Hitchcock was termed by as effective an advertiser as William H. Bowker "the father of agricultural education in this country," and Wilder was said to have been one of Morrill's chief advisers.³⁰ At the quarter-century celebration of the Massachusetts college a speaker claimed all honors for New England by naming as the big three of agricultural education,—Watson, Wilder, and Morrill.³¹

²⁸ For these pioneer movements general reference may be made to True, *History of Agricultural Education*, 33-88; Bailey, *Cyclopedia of American Agriculture*, 4:363-409, supplemented by the histories of the different institutions of which the most informing are: W. J. Beal, *History of the Michigan Agricultural College* (East Lansing, 1915); L. B. Caswell, *History of the Massachusetts Agricultural College* (n. p., 1917); R. H. Chittenden, *History of the Sheffield Scientific School of Yale University* (New Haven, 1928); Alexis Cope and T. C. Mendenhall, *History of the Ohio State University* (Columbus, 1920); W. H. S. Demarest, *History of Rutgers College* (New Brunswick, 1924); M. C. Fernald, *History of the Maine State College and the University of Maine* (Orono, 1916); W. W. Ferrier, *Origin and Development of the University of California* (Berkeley, 1930); W. L. Fleming, *Louisiana State University* (Baton Rouge, 1936); W. M. Hepburn and L. M. Sears, *Purdue University* (Indianapolis, 1925); W. T. Hewett, *Cornell University* (New York, 1905); Powell, *Semi-Centennial History of the University of Illinois*; F. P. Rand, *Yesterdays at Massachusetts State College* (n.p., 1933); P. C. Ricketts, *History of Rensselaer Polytechnic Institute* (New York, 1934).

²⁹ Chittenden, *History of the Sheffield Scientific School*, 1:291.

³⁰ Rand, *Yesterdays at Massachusetts State College*, 6, 27.

³¹ Massachusetts Agricultural College, *Addresses Delivered . . . June 21st, 1887, on the 25th Anniversary of the Passage of the Morrill Land-Grant Act*, 36 (Amherst, 1887).

New York's movement had a curiously assorted company of agricultural, labor, educational, and general reform leaders and philanthropists—John Delafield, Amos Brown, B. P. Johnson, Horace Greeley, Harrison Howard, and Charles Cook.³² In 1862 when Brown was seeking preferred standing under the new act, both Wade and Fessenden certified that he was the "father."³³ A generation later Brewer of Yale heatedly denied that Morrill had received any formative suggestions from this source and added a doubt as to the clerical educator's mental stability. The contemporary claim that Howard, the self-trained mechanic, was "the father and the founder of the People's College" seems to have gone unchallenged.³⁴

In adjoining regions James J. Mapes, editor, "agricultural consultant," and proprietor of the famous New Jersey experimental institute lent his influential name. Judge Frederick Watts of Pennsylvania and Charles B. Calvert of Maryland labored with equal zeal for a Federal department and agricultural colleges for their States. As early as 1855 the young scientists, Samuel W. Johnson and Evan Pugh, under the inspiration of European study and observation, planned an agricultural school for Pennsylvania on the most progressive lines of instruction, research, and extension.³⁵ The following year the president of the Virginia State Agricultural Society, Philip St. George Cocke recommended an elaborate and detailed plan of agricultural

³² The fullest source for the People's College movement is the Howard collection of manuscripts and clippings, including a rather full historical sketch by the chief promoter, in the Cornell University Library. The collection was used to some extent by Hewett.

³³ Wade to E. B. Morgan, Dec. 1, 1862; Fessenden to Morgan, Dec. 6, 1862, Hewett MSS., Cornell University Library.

³⁴ Brewer to Hewett, Feb. 4, 1894, *ibid.*; William Stuart, *Address Delivered before the People's College Association at its Annual Meeting, on Aug. 12, 1857*, p. 6 (Binghamton, n.d.).

³⁵ Copies of these letters in A. C. True Collection in the U. S. Department of Agriculture Library. On their early teaching and research plans, see also E. A. Osborne, ed., *From the Letter-Files of S. W. Johnson*, 66, 69-70, 75, 77, 83, 88, 92, 95-97, 103 (New Haven, 1913). For Mapes' ideas and proposals, see especially the files of the *Working Farmer* (New York, 1849-53).

education for his State, involving a college at the University and a centrally located practical school.³⁶

The Middle West, with its State universities and seminaries of learning, actual or projected, was especially fertile in agitators and experimenters. Foremost of such promoters were Norton S. Townshend, another "father of agricultural education in America," Freeman G. Cary, and John H. Klippart of Ohio; David P. Holloway of Indiana; John A. Kennicott and Bronson Murray, as well as Turner himself of Illinois; James S. Rollins of Missouri; Joseph R. Williams, whom friends claimed provided Morrill with his information and ideas and thus was chiefly responsible for the act, and John C. Holmes of Michigan; A. C. Barry and John H. Lothrop of Wisconsin; Benjamin F. Gue and Suel Foster of Iowa; John H. Stevens of Minnesota; and Andrew J. Moulder of California.³⁷

While several of this group have been credited with initiating the national movement, the claims for the western principal of the "Morrill-Turner controversy" have overshadowed all others of that section. To reach a conclusive decision as to his contribution it is necessary to put aside the nonogenerian reminiscences of Turner and his associate Murray, which have been too much relied upon, and rest the case upon available contemporary statements and records. On the basis of such sources the facts are substantially the following. In the forties, as Illinois agriculture was emerging from the pioneer stage, there was a movement among societies and papers to have the seminary fund applied to agricultural instruction, either in a separate institution

³⁶ *Report of the President of the Virginia State Agricultural Society, made to the Farmers' Assembly, at the First Annual Meeting, held in the City of Richmond, October 28, 1856*, p. 20-24 (Richmond, 1856). In establishing Kentucky University at Harrodsburg in 1859, John B. Bowman sought to provide, according to his avowed aim, a people's university. M. H. Pollitt, *A Biography of James Kennedy Patterson*, 99 (Louisville, 1925).

³⁷ C. W. Burkett, *History of Ohio Agriculture*, 199 (Concord, 1900). President W. O. Thompson of the Ohio State University ranked Townshend with Turner as "prophets" of the movement. "The Influence of the Morrill Act upon American Higher Education," Association of American Agricultural Colleges and Experiment Stations, *Proceedings*, 1912, p. 89; Beal, *History of Michigan Agricultural College*, 36-39.

or by professorships in existing colleges. Turner, who had long been associated with the free-school agitation, was the most voluble of the participants. After recanting an early recommendation for engrafting the new education upon classical colleges, he brought forward his celebrated industrial university plan in 1851 at a convention of farmers and mechanics called for the express purpose of considering the establishment of an "agricultural university." This disquisition and prospectus characteristically combined sensible observation with intemperate diatribe and quixotic proposal. The existing higher education, represented as a pedantic classicism, was wholly in the interest of the professional groups; the various "industrial classes" were entirely neglected. To realize the "final object" of making the industrials "thinking laborers" and the professionals "laborious thinkers," the reformer offered an impressionistic scheme in which a practically motivated college curriculum was joined with the demonstrational and exhibitional activities of agricultural societies. The actual "university" setup, so far as it may be visualized amid the discursive homilies, indicated a lack of understanding and appreciation of the scope and method of a technological institution. In comparison with contemporary proposals, Turner lacked the social realism of Howard and Greeley, the systematic organization of Norton, Hitchcock, and Cocks, and the scientific precision of Pugh and Johnson. The interest of social reformers was probably due to the rhetorical onslaught on the traditional aim and content of higher education. The plan was widely distributed in pamphlet form and through the influence of Richard Yates, who had been a student of the author, it was printed along with two other schemes for agricultural education in the Patent Office Report for 1851.

To further their general aim, the Illinois enthusiasts formed an "industrial league" which conducted an active campaign of lectures and newspaper correspondence for several years. Turner was fully in his element in such work—speaking widely in his own and neighboring States and writing letters to newspapers and articles for such journals as the *Cincinnatus* of his congenial friend Cary. By the middle of the decade it was

felt that the State was won to the idea and that effort should be centered on Federal aid; accordingly they supplied Congress with State and county memorials. Doubtful of executive support and advised of the wisdom of letting the older States lead off, the westerners willingly allowed New England to take the initiative.³⁸ According to Turner's old-age recital, followed unquestioningly by filial biographer and university historians, the Illinois group persuaded Morrill to become their reluctant spokesman and supplied him with the necessary materials.³⁹ Such a relationship is directly opposed to Turner's precise contemporary account. In an historical review of the industrial campaign for the state agricultural society in 1865 he wrote: "During this interval, the Hon. Mr. Morrill, the representative from Vermont, first presented the bill to Congress, known as the 'MORRILL BILL,' and secured its passage through the House. We forwarded to him all our documents and papers, and gave him all the aid and encouragement that we could. He managed the cause most admirably."⁴⁰ There is no suggestion here of Illinois initiative which would have been stressed if true, and all other evidence is to the same effect. Less than two months before Morrill introduced his bill the Illinois interests at home and in Washington had no legislative plan, and that was obviously too short a time to prepare the measure and coach the spokesman.⁴¹ Most conclusive is the nature of the bill itself which differed so radically from Turner's general plan and the specific requests of his league. In contrast to western equality of grant there was the compensatory eastern proportional distribution. The Illinois plan of 1854 had guaranteed a certain minimum endowment, whereas the bill left the States to realize

³⁸ Carriel, *Life of Jonathan Baldwin Turner*, 70-158; Powell, *Semi-Centennial History of the University of Illinois*, 14-91, 357-437; *The Cincinnati*, 3:78-79 (Cincinnati, 1858); Commissioner of Patents, *Report*, 1851, 2:37-44.

³⁹ Carriel, *Life of Jonathan Baldwin Turner*, 159; Powell, *Semi-Centennial History of the University of Illinois*, 95; James, *Origin of the Land Grant Act*, 35.

⁴⁰ Turner to J. B. Reynolds, Nov. 28, 1865, Illinois State Agricultural Society, *Transactions* (1861-64), 5:38.

⁴¹ Trumbull to Turner, Oct. 19, 1857, Carriel, *Life of Jonathan Baldwin Turner*, 158.

what they could from the grant. Turner was doubtful of the inclusion of classical studies in his university and the league's memorial called only for "liberal and varied" studies, but the easterner's bill gave the old disciplinary subjects express safeguard. Naturally Turner felt and asserted that the bill as introduced needed various corrections.

Turner's contemporary attitude, in contrast to old-age egoism, was one of humble gratitude to the legislative leader. At the Normal University commencement in 1858, according to newspaper reports, he advocated "the passage of what is known as the Morrill Bill." In 1861 he evidently sent assurance of his continued interest and received a formal and rather distant response which, as the only extant letter from Morrill, has been much emphasized by supporters of the Turner thesis.⁴² The relation or lack of relation of the two men is still more conclusively established by a letter which the professor wrote to the Senator in 1872 when the bill for increased support was pending. After thanking Morrill in behalf of Illinois friends of the cause for his able speech, Turner added, "You may not know or you may have forgotten amid your many cares and labors, that I always felt a deep interest in this subject and watch its progress with great solicitude; so do a great army of our very best men in the west, who are wholly outside of all political circles and interests." After wishing the Senator all success in his efforts for the great cause, Turner concluded in the resigned martyr tone that he expected nothing for himself but added burdens and sought only the glory and good of the republic.⁴³ It has been stated that the two men carried on a "voluminous correspondence," much of which was somehow destroyed during the war, but in the very carefully preserved files of the Senator this letter is the sole exhibit.

The same discrepancy appears between the contemporary record and senile illusions regarding his relations with Lincoln,

⁴² *Ibid.*, 143, 164; Powell, *Semi-Centennial History of the University of Illinois*, 97; James, *Origin of the Land Grant Act*, 36. There is no copy in the Morrill Papers.

⁴³ June 4, 1872.

who has inspired so many sincere fantasies. Both Bailey and Davenport were told by the aged educator that he had taught Lincoln mathematics and that between lessons the two young enthusiasts "dreamed out together the hope for a new education in the practical things of life."⁴⁴ The real influence while indirect was one of which any teacher might be proud and naturally come to distort, even to the study involved, in nonogenerian retrospection. In a home letter from Washington in 1862 Turner reported a recent visit with the President: "He also told me his only instruction in the English language had been from me, through the Green brothers of Tellula, Illinois, while they were students of Illinois College and he was a hired hand working for their mother in the harvest-fields."⁴⁵

The ebullient associate of the Yale Band belonged to the visionary agitator type so characteristic of the Middle Period. His interests and enthusiasms were sufficiently broad and varied to include, at one time or another, abolitionism, psychiatry, liberalized theology, anti-Mormonism, spiritualism, mesmerism, monetary philosophy, inland waterways, national capital removal, land speculation, anti-monopoly, mechanical inventions, and horticultural, entomological, and agronomic experimentation, as well as educational extension and reform. He was far better qualified to arouse enthusiasm for a cause than to formulate definite, workable plans and to cooperate effectively in their realization. His quixotic and whimsical bent of mind was shown in his proposals for the charter of the State university and even more in his pamphlet on "Industrial University Education" in which his peculiar hobbies and phobias were given full expression. Even President James admitted that many of his views were extreme and that we have not yet caught up with his educational visions.⁴⁶

With the most definite and active organization in the industrial

⁴⁴ Bailey, *Cyclopedia of American Agriculture*, 4:409; Davenport, "College Education in Agriculture," 48.

⁴⁵ Carriel, *Life of Jonathan Baldwin Turner*, 278.

⁴⁶ *Ibid.*, 175-176; review of the pamphlet in the *Cultivator*, 12:229 (1864); James, *Origin of the Land Grant Act*, 30.

agitation it was natural that the Illinois group should emphasize their priority, but it is to be noted that in contemporary discussion it was the State movement with a recognized group of leaders and organizations rather than one particular individual to whom credit was accorded.⁴⁷ Any special prominence given to Turner at the time was due not so much to constructive originality as to hectic enthusiasm and picturesque volubility.

These disputes over precedence had not arisen when the land-grant bill was pending at the beginning of the Civil War. Then there was little enough glory for anyone and discouragement for all. Many of the ventures had been premature and ill-considered; all suffered from crudity of information, inadequacy of support, and popular prejudice and indifference. Still there were a few sound beginnings that offered a small nucleus for a matured system of technical education. By a conservative estimate there existed by 1862 "twenty institutions which could be grouped under the general title of scientific schools."⁴⁸ The Michigan Agricultural College in 1857 was the pioneer of that grade, though the Farmers' High School of Pennsylvania was started three years earlier and became a college in 1859 under the direction of Pugh, who was glad to follow a more modest plan than he had visioned amid European laboratories. New York had launched, most precariously, both a people's college and a State agricultural college; Maryland's State-subsidized institution was under way; and Massachusetts' definitely planned. The Sheffield school at Yale, the Lawrence at Harvard, the Chandler at Dartmouth, and the Rensselaer and Massachusetts institutes gave promise for their types of instruction.

Other efforts had made still less advance. In the South long

⁴⁷ Statement of Kennicott and Turner in the *Prairie Farmer*, 11:81 (Feb. 7, 1863); "Report of the Illinois State Superintendent, 1865," Commissioner of Education, *Report*, 1867-68, p. 305; Carriel, *Life of Jonathan Baldwin Turner*, 173.

⁴⁸ [D. C. Gilman], "Our National Schools of Science," *North American Review*, 105:501 (Boston, 1867); U. S. Agricultural Society, *Monthly Bulletin*, 1:88 (December 1858); J. R. Williams, "Agricultural Colleges at Home and Abroad," *De Bow's Review*, 26:250-256 (March 1859); Evan Pugh to Johnson, Oct. 31, 1855, Oct. 18, 28, 1859, Jan. 6, 1860, copies in the U. S. Department of Agriculture Library; Osborne, *From the Letter-Files of S. W. Johnson*, 142-143.

and persistent agitation in Virginia, South Carolina, and Alabama was without tangible result at the outbreak of war. Neither Townshend's itinerant school nor Cary's Farmer's College had found needed support in the Buckeye State, and Editor Holloway's plea for a college with a farm where a boy could "learn to work and work to learn" had failed to motivate the Hoosiers. A decade of agitation by the Illinois industrialists had led only to the appropriation of the seminary fund for a "normal university." The arguments of the *Wisconsin Farmer* and the recommendations of the president had been unavailing in securing an agricultural unit for the new State university. The sponsors of "The Iowa Agricultural College and Farm," still an open prairie farm, were fighting to save their nascent campus from an unfriendly legislature, while the neighboring Minnesota project, though loyally supported by the State agricultural society, had not passed from the organization stage. California's legislature had also been insensible to the repeated appeals of the State superintendent for a military-industrial institute.

Most of these projects, whether sufficiently tried to be aware of inadequacy of resources or not yet able to make the initial move, came naturally, in accord with past practices, to seek national aid. Most notable of the earlier appeals had been the proposals in the thirties to utilize a portion of the Smithsonian fund, the significant memorial in 1842 of Alden Partridge of Norwich University to apportion the public land receipts among the States for the establishment of technical schools, and the plans of John S. Skinner in 1848 and Daniel Lee in 1850 for agricultural and engineering West Points. During the early fifties at least half a dozen States, as widely separated as California and New York, sought special land grants, and in 1854, Illinois proposed grants to the value of at least half a million dollars to each State. It was claimed with much reason that the pressure of these numerous State appeals contributed very directly to a general grant act.⁴⁹

⁴⁹ For instance, Howard in his manuscript history of the People's College. For a summary of the national movements, see True, *History of Agricultural Education*, 88-93; Fleischman's plan for use of Smithsonian fund, *Cultivator*, 6:24 (1839); Skinner's plan, *the Plough, the Loom, and the Anvil*, 1:321 (1848).

In this agitation for national aid for agricultural colleges there was an interlocking of interests with the movement for a national department of agriculture. Not only were both seeking Federal support and direction for agriculture but the proposed department or bureau would be the natural agency through which to administer the educational establishments from the Federal side. Richard Yates' query to Turner in 1854—"Would not an agricultural bureau be the proper head to which reports, etc., could be sent?"—suggested a logical administrative adjustment for an educational system mainly agricultural.⁵⁰ Holloway, Watts, Calvert, and Wilder were the most prominent and influential promoters of both measures, while Johnson of New York, Klippart of Ohio, and Turner and Kennicott of Illinois were all at one time or another mentioned for the commissionership. The special clearinghouse of both causes throughout the fifties was the distinguished and esteemed United States Agricultural Society. Several of the college proposals came before the society and in 1857, after strong southern opposition, the Illinois plan was approved by a close vote.⁵¹

It is evident that through the efforts of many pioneers—famous and obscure—the agricultural or industrial college movement was initiated in essentials and, for the time, well advertised when the Vermont Representative sought national aid. Partial, exaggerated, and anachronistic as many of these claims undoubtedly are, they all have a certain basis and indicate the numerous, varied, widely-distributed, and long-extended contributions to the cause. Dean Davenport after some years of further investigation, while reaffirming his partiality for the Turner theory, was led to confess, "As a matter of fact, there were many men and many centers of influence that contributed to the general result; and just who or what was chiefly responsible for the particular form which the movement finally took in the land grant act, we shall probably never know."⁵² Atherton

⁵⁰ Carriel, *Life of Jonathan Baldwin Turner*, 155-156.

⁵¹ U. S. Agricultural Society, *Journal*, 1856, p. 24, 78-79; 1857, p. 61-66; Lyman Carrier, "The United States Agricultural Society, 1852-1860," *Agricultural History*, 11:278-288 (October 1937).

⁵² Davenport, "The American Agricultural College," Association of American Agricultural Colleges and Experiment Stations, *Proceedings*, 1912, p. 157.

thought the terms of the Act of 1862 "so remarkable for comprehensiveness, and almost prophetic insight, that due credit should be given for them," but, like Bryan's cross of gold speech, the act was an epitome and composite of a decade of formative discussion.⁵³

The combination of opposing views that seemed necessary for the bill's acceptance registered the varied sources that were drawn upon. The Illinois plan for land endowment, in greatly lessened amount, was joined to the Partridge plan of distribution. Technical and classical training were balanced. In his inaugural address in 1884, President William H. Scott of Ohio made frank admission of this conflict of aims: "It does not require a very close scrutiny of this language to discover that it is not the statement of a single mind setting forth a single untrammelled purpose. It is the welding of two opposite views. Minds that were agreed on the general question of appropriating public lands for education, were at variance as to the kind of education for which it should be appropriated. The result was a compromise—a compromise which consisted not in abandoning the extremes for intermediate ground, but in a union of the extremes."⁵⁴

True concluded very moderately: "Morrill's measure was in fact the culmination of the long movement for agricultural and technical schools . . . and it is altogether likely that Morrill derived the ideas incorporated in the bill from various sources connected with that movement."⁵⁵ Originality under the circumstances would have been as ineffective as it was needless. Not to have a reasonable familiarity with the long-continued campaign for educational expansion and reform would have been a reflection on any member of Congress, to say nothing of a New Englander reputed to be an authority on the subject. The appropriate course for a practical statesman in formulating such

⁵³ Atherton to Morrill, Apr. 25, 1883. James, *Origin of the Land Grant Act*, 26, emphasizes the similarity of phrases of the act with those of Turner, but the same resemblance may be found in the People's College and other industrial institutions.

⁵⁴ Ohio State University, *Annual Report*, 1884, p. 110.

⁵⁵ True, *History of Agricultural Education*, 99.

a measure would seem to have been to cooperate fully with all responsible agencies and to select the best from the various proposed plans. Disregard for such experiences and advice would have marked an irresponsible innovator who could not have continued to represent the Green Mountain State for upwards of a half century.

However, whether due to overweening jealousy for a favorite act or to the disproportioned sense of originality which a self-taught person tends to give to his ideas—augmented no doubt by academic flattery in high places—Morrill saw fit in his explanation of origins and motives to ignore the experimenting and planning of educators and reformers and consistently to attribute the ultimate source of inspiration to personal experience and cogitation. The result was the conclusion that the public lands might be more profitably and equitably disposed of, that farming methods were coming to be in a bad way, that as "the son of a hard-handed blacksmith" he "could not overlook mechanics," and the recognition that the existing educational situation was inadequate for these ends. In preparation for his bill he had meditated long on the foregoing considerations, delved deeply into statistics, and marshalled his arguments to penetrate the indifference of his colleagues.⁵⁶ At least he held to the jewel of consistency. In a memorandum on the act in the seventies he wrote, "Where I obtained the first hint of such a measure, I am wholly unable to say"; he informed Atherton in 1883 that the phraseology was wholly his own; Howard in 1885, "I do not remember that I ever heard a hint of it from any quarter until it was brought out by myself;" and Hewett in 1894, "I do not remember of any assistance in framing my Bill prior to its introduction."⁵⁷ In a final public apologia of his educational service he referred to the acts of 1862 and 1890 as embodying "the best thoughts I was able to formulate—good enough to be adopted by Congress—and the first to be approved by President Lincoln. . . . Some other man doubtless might have constructed a different

⁵⁶ Parker, *Life and Public Services of Justin Smith Morrill*, 262-263.

⁵⁷ *Ibid.*, 262; Atherton, "Legislative Career of Justin S. Morrill," 67; Howard Collection; Morrill Papers.

and better measure, but doubtless he did not think of it 35 years ago, and unfortunately it may now be too late for anything except to decorate with some scorn and detraction the College we now have, and cover the scheme of a proposed substitute, in whatever time, place or shape it may have an untimely birth, with his entire approbation without money or price."⁵⁸

So simple and personal an explanation of origin and motive is untenable in view of the contemporary educational and political situation and of Morrill's own recorded experiences. He had been interested in educational changes for a long time. In 1848 in reply to an invitation to become a trustee of Norwich University he expressed hearty accord with the effort of that institution to modify the conventional college curriculum by replacing traditional subjects with those of "more practical value," and the military feature he regarded as "a healthful as well as a useful and elegant bodily exercise."⁵⁹ From his contact with Norwich he was of necessity conversant with the ideas and proposals of the founder, Alden Partridge, and as an intelligent New Englander he must have had at least general familiarity with the applied science work at Yale, Harvard, and Amherst, and the promotive efforts of men like Wilder and French. He was a delegate to the meetings of the United States Agricultural Society at which the Illinois plan was discussed and the problems of agricultural education were presented at length.⁶⁰ For years the agricultural and popular periodicals had been considering the varied aspects of technical education, and in 1858 Cary had called Morrill's attention to Turner's article in the *Cincinnatus*.⁶¹ His enthusiastic tribute to the People's College and its patron in 1863 showed long familiarity with that movement.⁶² That the new Representative's educational notions had been altered decisively from some quarter within a year is evidenced by the fact that his first move was a resolution, in 1856, asking the Committee on

⁵⁸ Morrill's Vermont commencement address, 1893, *Land-Grant Colleges*, 26.

⁵⁹ Morrill to Ira Davis, Dec. 8, 1848.

⁶⁰ U. S. Agricultural Society, *Journal*, 1856, p. 7-8; 1857, p. 10.

⁶¹ Cary to Morrill, Feb. 5, 1858.

⁶² Morrill to Charles Cook, July 23, 1863.

Agriculture to inquire into the expedience of establishing a national board and schools of agriculture, with students selected on the same basis as the military and naval academies.⁶³

The doubt cast upon Morrill's alleged educational aims and motives has suggested possible political incentives. The desire of a loyal adherent of the new Republican Party to appeal to the still dominant agricultural interest, and more especially for the champion of the new protection to bear a gift with the objectionable schedules—a gift, too, which would help to realize the time-honored Whig design of distribution—all seems highly plausible, even if one hesitates to accept unreservedly the suggestion that the grant was a mere "pawn in the political game."⁶⁴

Whatever the party influence involved there can be no doubt about the sectional factor. In his open criticisms of past grant policies and his private denunciations of the western opponents of his bill along with his efforts to defer the homestead and limit the Pacific railroad grants the characteristic New England public land attitude was manifested. From the other side, in the debate on the first bill, representatives of the newer States with large areas of unappropriated lands joined with the States' right South in opposition, and against the final act the same western element made the most bitter and persistent attack to which any portion of the free-soil program was subjected.⁶⁵

In meeting this opposition Morrill had distinguished and effective aid, in Congress and out, especially in the struggle over the first bill which really determined the ultimate legislative action. In direct contrast to his lone-hand attitude on authorship, Morrill gave frank and generous recognition of his legislative support. Old-line Clay Whigs welcomed the measure for its appropriateness to the American system, and "Brave old Ben Wade," probably impressed by the growing influence of agricul-

⁶³ *Congressional Globe*, 34 Congress, 1 Session, pt. 1, p. 530 (1856).

⁶⁴ Kandel, "Federal Aid for Vocational Education," 85-88; H. C. Taylor, *Educational Significance of the Early Federal Land Ordinances*, 121 (New York, 1922).

⁶⁵ Quotations and citations are given in E. D. Ross, "Northern Sectionalism in the Civil War Era," *Iowa Journal of History and Politics*, 30:463-466 (October 1932).

tural societies back home, guided the second bill through the Senate with the help of the ex-schoolman Harlan.⁶⁶ Hardly less determining were the efforts of an eminent group of lobbyists representing hopeful promotions. Gilman observed, perhaps with a shade of irony: "There were busy and devoted men in New York, Pennsylvania, and Illinois, who spared no effort within their power to secure a national appropriation."⁶⁷ On both occasions, Amos Brown, supported apparently by People's College backers, worked tirelessly and effectively on doubtful members. Morrill's unqualified tribute, in all of his versions, to the faithfulness and effectiveness of this aid would seem to disprove the charge made in later years by Brown's brother that the Senator was bitterly jealous of the veteran educator.⁶⁸ The New York delegation in Congress as well as Fessenden, Wade, and others certified to the determining influence of Brown's lobbying work. Wade later gave his deliberate judgment with characteristic bluntness: "The Agricultural College land bill never would have passed Congress in God Almighty's world, had it not been for the efforts of Dr. Amos Brown."⁶⁹ Evan Pugh supported the measure with his usual enthusiasm, and two years later, in his notable report on agricultural colleges, gave the main credit to his State for its enactment: "The friends of the Agricultural College of Pennsylvania secured the passage of the Land Grant bill by Congress. . . . *Without their aid the bill would not have passed.*"⁷⁰ Friends of Joseph R. Williams claimed that he provided the information for Morrill's speech and brought decisive influence to bear upon a determining number of votes. Morrill's statement was that the Michigan president furnished

⁶⁶ Memorandum and letters to Howard and Hewett cited in footnote 14; White, *Proceedings at the Unveiling of the Portrait of the Honorable Justin S. Morrill*, 14-15; Thompson, "Influence of the Morrill Act," 89; Cope and Mendenhall, *History of the Ohio State University*, 3:174-175.

⁶⁷ Gilman, "Our National Schools of Science," 501-502.

⁶⁸ M. Brown to Hewett, Feb. 20, 1894, Hewett MSS.

⁶⁹ J. E. Brown to Hewett, Apr. 2, 1894, *ibid.* Copies of the testimonial letters are in this collection.

⁷⁰ Evan Pugh, *Report upon a Plan for the Organization of Colleges for Agriculture and the Mechanic Arts*, 34 (Harrisburg, 1864).

the material on European schools which Walbridge used so effectively in his minority report for the public lands committee.⁷¹ In any case the service was real. Other western helpers were Cary of Ohio, seemingly about equally interested in promoting the college bill and his educational paper;⁷² Holloway of Indiana, soon as Commissioner of Patents to urge a department of agriculture; and Kennicott of Illinois, an active candidate for the headship of that projected establishment. The United States Agricultural Society endorsed the bill unanimously in 1858, and the next year Calvert, reporting for its committee on a department, said that the measure had not been urged partly because "the agitation of the subject might endanger the success of the 'Morrill Land Bill,' in which many of the agriculturists of the country took a deep interest."⁷³ Turner, it should be noted, was not on hand for either bill. He was called to Washington in the fall of 1862 by the illness of his son and had extended conversations with the President and other leaders, but in his full accounts in home letters there are no references to the subject of education. Greeley, whose support Morrill gladly recognized and who was wholly free from sectional bias in a cause of this sort, divided final honors between Morrill, Wade, and Brown.⁷⁴

Lincoln's positive relation to the act of 1862 has been greatly exaggerated. In view of his extreme Whig convictions as to the proper function of the executive he was not likely to seek to influence the action of Congress—especially with a measure having in any way to do with finance,—but there was every reason why he should approve this act and no valid one of conviction or party expedience for his opposition. He had given Turner amiable assurance—as had his opponent Douglas—that

⁷¹ Beal, *History of the Michigan Agricultural College*, 36, 38-39; Parker, *Life and Public Services of Justin Smith Morrill*, 265.

⁷² Letters to Morrill, Feb. 5, 1858, Feb. 15, 19, 1859.

⁷³ U. S. Agricultural Society, *Monthly Bulletin*, p. 3-4 (February 1858); U. S. Agricultural Society, *Journal*, 1859, p. 18. T. G. Clemson's biographers, on the basis of very incomplete evidence, attribute considerable influence to his support of the bill. A. G. Holmes and G. R. Sherrill, *Thomas Green Clemson, His Life and Work*, 19, 123, 128, 143 (Richmond, 1937).

⁷⁴ *New York Tribune*, June 21, 1862.

he would support a measure which had such popular appeal in his own State and which Buchanan's veto had confirmed as an appropriate part of the free-soil new deal; but he had no competent understanding or personal interest in industrial education.⁷⁵ In his address before the Wisconsin State Fair in 1859, he showed full complacency with the existing institutions and facilities of popular education.⁷⁶ Repeated efforts have been made to find some direct connection between Lincoln and the bill before it came to him for his signature, but there is no evidence whatever that he gave the matter special thought.⁷⁷

The properly much-lauded act of 1862, providing a conditional endowment of problematical value, offered the possibility of strengthening and stabilizing existing industrial colleges and the opportunity of starting additional ones. In itself the act assured nothing. The acreage or scrip was to be had only on certain conditions, the fulfillment of which was far from assured, for certain not too clearly defined purposes. Contrary to later assumptions regarding the immediate influence, it seemed doubtful in the early years that the grant would be widely utilized. Greeley, one of the greatest enthusiasts, sought to discount limited application by the assurance that the act would be justified if not more than five States took advantage of it.⁷⁸

Public indifference—especially of the “industrial classes”—was discouraging to the reformers. President Thompson, impressed apparently by the evidence of certain organized movements in Ohio, maintained that the sentiment for the new colleges “amounting practically to public clamor . . . this new educational reform sprang, not from the educational philosophers or the professional teachers, but from the rank and file of the people themselves.”⁷⁹ The evidence is quite the contrary. Throughout the agitation there had been the indifference or self-complacency

⁷⁵ Carriel, *Life of Jonathan Baldwin Turner*, 159-160.

⁷⁶ J. G. Nicolay and John Hay, eds., *Abraham Lincoln, Complete Works*, 1:582-583 (New York, 1902).

⁷⁷ Hewett to Morrill, Feb. 2, 1894; J. E. Brown to Hewett, Apr. 2, 1894, Hewett MSS.

⁷⁸ *New York Tribune*, June 21, 1862.

⁷⁹ Thompson, “Influence of the Morrill Act,” 89.

of the farmer to contend against. A frontier background of land abundance and the traditions of extensive cultivation led inevitably to a spirit of self-confidence and sufficiency.⁸⁰ Furthermore, while a degree of education was not to be despised, there was the assurance that the public school, if adequately utilized, would provide needful training for ordinary life experiences. The Chief Justice of the Wisconsin Supreme Court at a State fair in 1852 expressed the prevailing confidence with something of a flourish: "Common school instruction is the birth-right of every son and daughter of Wisconsin. The Pierian Spring bubbles literally at your door-steps, and your children and your childrens' children have but to kneel down and drink of the waters of knowledge. Ignorance among us must be hereafter a disgrace. The *will* only is wanting . . . to make the future population of Wisconsin the most generally, if not the most thoroughly, educated people on earth."⁸¹ In an obituary tribute Matthew Hale Smith drew the moral from Lincoln's career that "The child of the lowly and of the exile, can gain an education free as the air, and good as that which VICTORIA can give her titled children, with the treasury of her kingdom at her command."⁸²

The slight discussion of the bills in newspapers and agricultural and popular journals reflects the lack of general interest. The *Country Gentleman* printed the resolutions of the Vermont State agricultural society and two brief editorial paragraphs on the original bill, while both the *American Agriculturist* and the *New England Farmer* ignored it. To the final act the *Country Gentleman* gave a brief editorial comment and the *American Agriculturist* a dozen-line summary with the promise, "We shall have more to say upon this Act," but failed to say it for over a year.⁸³

⁸⁰ T. C. Blaisdell, ed., *Semi-Centennial Celebration of Michigan Agricultural College*, 91, 209 (Chicago, 1908); Gail Hamilton, "Glorying in the Goad," *Atlantic Monthly*, 14:24-33 (Boston, 1864); *Rural New Yorker*, 41:795-796 (1882); E. W. Hilgard, "Progress in Agriculture by Education and Government Aid," *Atlantic Monthly*, 49:651 (Boston, 1882).

⁸¹ Wisconsin State Agricultural Society, *Transactions*, 1852, p. 25.

⁸² *Merchants Magazine and Commercial Review*, 52:331 (New York, 1865).

⁸³ *Country Gentleman*, 11:81, 273 (1858); 13:160 (1859); 20:13, 17 (1862); *American Agriculturist*, 21:197 (1862).

The *New England Farmer* remained silent, and *Poole's Index* to 1891 listed not over half a dozen significant articles.

While some thirteen State legislatures instructed for the first bill and most of the free States for the second, popular pressure is nowhere indicated. The Republican platform of 1860, which emphatically endorsed homestead and Pacific railroad grants, ignored the long-agitated department of agriculture and agricultural colleges. Leaders like Douglas, who sensed so surely public feeling, would have given more than passive support if there had been sufficient demand.

Undoubtedly public interest was much less in 1862 than four years before. As Greeley wrote at the beginning of the war: "In the tense, absorbing excitement of our life-and-death-struggle for national existence, events which in calmer times would quicken every pulse, and arrest universal attention, pass all but unnoticed."⁸⁴ At best educational policies are not usually pulse-quickeners. Turner admitted in 1863 that the act had come ten years before he expected it and that it might be another decade before his State was ready for it.⁸⁵ Congressional discussion had contributed little to public interest and enlightenment. As has been suggested, the debate on the second bill concerned the economic prejudices of the New West just as that on the first did the constitutional scruples of the Old South. The final act went through the lower house by the previous question route without debate, and the only approach to or pretense of educational discussion was in Morrill's speech of 1858.

This popular indifference, which necessitated the "selling" of the idea by its supporters, was not the only obstacle in the way of the utilization of the grants. Equally formidable was the contest of rival educational groups to persuade or coerce the legislatures to give or share the Federal bounty. The resulting scramble was unseemly, unacademic, and, all too often, unethical.⁸⁶

⁸⁴ "Across the Continent," *Continental Monthly*, 1:78 (New York, 1862).

⁸⁵ *Prairie Farmer*, 11:81 (Feb. 7, 1863).

⁸⁶ Pugh, *Report upon a Plan for the Organization of Colleges*, 32-35; Howard, *Historical Sketch of People's College*; White, *Proceedings at the Unveiling of the Portrait of the Honorable Justin S. Morrill*, 8-9; E. S. Carr, *The Patrons of Husbandry on the Pacific Coast*, 370 (San Francisco, 1875).

In general the leaders in the earlier State movements were most influential in securing and determining the conditions of acceptance, but there were notable exceptions. Ezra Cornell's practical promotive genius and visionary humanitarian zeal restrained and directed by the broad, liberal wisdom of Andrew D. White determined New York's course. Brown, in spite of influential political endorsement, was not seriously considered for the presidency of the new university, while Harrison Howard rejoiced that the basic aims of his long agitation were being more fully realized than they could have been in the small provincial college.⁸⁷ Dr. John W. Hoyt, who was to make an impress on the educational systems of several States, came opportunely to Wisconsin to be a directing influence.⁸⁸ In Ohio the zeal for the practical of Townshend and Klippart was not so effective as the cooler and saner views of Joseph Sullivant.⁸⁹ In Illinois, in the competitive struggle for location, Turner's region was beaten by what was regarded as unscrupulous tactics, and it was some time before the protagonist of the Industrial League could be brought to give his blessing to his State's "industrial university."⁹⁰ Supporters of the new education in some States were so unprepared or divided that temporary adjustments were made to enable the national bequest to be held until more permanent disposition could be made. In all cases, however, the settlement was due to local interests and leadership rather than to any guiding or determining principles of the national act.

With the acceptance and apportionment of the endowment—whether to new or existing institutions—the most essential step remained to be taken in determining and adjusting the place of the new type of collegiate instruction and securing adequate financial support. As Gilman wrote in 1867: "Two critical epochs have been passed,—the Congressional and the Legislative.

⁸⁷ Howard Papers; U. P. Hedrick, *A History of Agriculture in the State of New York*, 422 (Albany, 1933).

⁸⁸ Wisconsin State Agricultural Society, *Transactions*, 1861-68, p. 74-79, 102-104; *Wisconsin Farmer*, 14:470-471 (Madison, 1862).

⁸⁹ Cope and Mendenhall, *History of the Ohio State University*, 1:27, 36-37, 47.

⁹⁰ Carriel, *Life of Jonathan Baldwin Turner*, 177-226; Powell, *Semi-Centennial History of the University of Illinois*, 1:178-271.

Now comes the third, the period of development."⁹¹ Each State originally tended to go its own way, but there soon developed two rival camps of applied-science educators: the practical industrialists desiring schools of agriculture and mechanics in which manual labor would have a leading place, and the supporters of more general and liberal "national schools of science"—the "narrow gauge" and the "broad gauge" educators. Michigan and the Sheffield School represented the two extremes, while other colleges sought something of a reconciliation. The new Bureau of Education was favorable to the more liberal type, the Department of Agriculture was emphatically committed to the practical. The resulting struggle led in some cases to the founding of new institutions and in others to long continued dissension.

Both groups appealed to Morrill, but to little definite purpose. Atherton maintained that "scarcely anyone except the author of the bill showed any clear understanding of its real scope and meaning," but it soon developed that if he understood he was most reticent in his revelations.⁹² As an educational writer of the eighties pointed out, Morrill's speech of 1858 gave the fullest statement of his intent but was definite only on two points, the relation of extensive cultivation to agricultural decline and the European evidence of the corrective value of education.⁹³ Judging by this speech and later utterances, his plan at the beginning, beyond that of benefiting and raising the relative status of the farmer and mechanic, was as indefinite as that of the average contemporary reformer, and his interpretation of the scope and purpose of the institutions to which his name and fame had become attached so intimately, changed decidedly with the years. From the original intent of giving aid directly to the industrial classes, his design expanded to national schools of science in which agriculture and mechanic arts should have preferred standing, further broadened to the balanced all-around

⁹¹ Gilman, "Our National Schools of Science," 514.

⁹² Atherton, "Legislative Career of Justin S. Morrill," 66.

⁹³ Annie T. Smith, "The Education of Agriculturists," *Education*, 2:167 (Boston, 1881).

education of the industrial classes, and finally rested upon the extended scope of university instruction by a greater emphasis upon pure science and modern language and the addition of the applied sciences.⁹⁴ The influence of scholars and administrators like President Buckham and Judge Benedict of Vermont and of White, Gilman, and Brewer upon his developing educational theory is apparent.⁹⁵ Above all, in later years Morrill's land-grant educational philosophy seems to have been shaped and adjusted by the needs and exigencies of his own State university, with its notoriously slow development of applied science instruction, and its long struggles with rival colleges and granger and other unfriendly agricultural groups, involving serious threat of division.⁹⁶

Whatever his personal views as the reputed, and in time traditionally revered father, he tended to tolerate and in most cases to give rather indiscriminate blessing to all of the offspring regardless of their contrasting organizations and aims. In the

⁹⁴ Cf. Kandel, "Federal Aid for Vocational Education," 82-85. It is not to be understood that there was the consciously reasoned alterations in his thinking that this summary may suggest, but to judge by his somewhat ambiguous and at times contradictory statements, this seems to have been the trend of his relative emphasis. The best sources for his changing views after the initial act are the debate on the bills of 1872, 1876, and 1890 (*Congressional Globe*, 42 Congress, 3 Session, pt. 1, p. 36-40 (1872); *Congressional Record*, 44 Congress, 1 Session, August 26, 1876, p. 2761-2767; 51 Congress, 1 Session, June 4, 1890, p. 6084-6085); White, *Proceedings at the Unveiling of the Portrait of the Honorable Justin S. Morrill*; "The Industrial Colleges," *Agricultural Science*, 1:11-12 (Geneva, 1887); Massachusetts Agricultural College, *Addresses Delivered . . . June 21st, 1887, on the 25th Anniversary of the Passage of the Morrill Land Grant Act; State Aid to the U. S. Land-Grant Colleges; an Address in Behalf of the University of Vermont and State Agricultural College . . . at Montpelier, October 10, 1888* (Burlington, 1888); *The Land-Grant Colleges*.

⁹⁵ See especially letters from G. W. Benedict, July 18, 1865; Buckham, continuously from the earlier seventies; White, Aug. 25, 1873, Nov. 2, 1874, Oct. 14, 1893; and the report of the Sheffield conference cited in footnote 98.

⁹⁶ Borne out by his correspondence with Buckham and others and by his references to the State situation in his address to the Legislature in 1888 and commencement address of 1893. For the slow development of the university in industrial education, see J. B. Angell, *Reminiscences*, 122-123 (New York, 1912); Commissioner of Agriculture, *Report*, 1872, p. 384; 1874, p. 344-345; B. F. Andrews, "The Land Grant of 1862 and the Land-Grant Colleges," *Bureau of Education, Bulletin 13* (1918), p. 50.

early years farming enthusiasts, without recorded contradiction, cited statements indicating that a college farm and required manual labor were basic in his plan,⁹⁷ while the Sheffield group in the intimacy of a personal visit secured an admission that a farm though desirable was not strictly essential, that manual labor was suitable mainly for physical exercise, and that their school was fulfilling the intent of the act both in letter and in spirit.⁹⁸ During the first year of the new act Charles Cook was adjured that upon the action of the People's College board the success or defeat of the whole plan largely depended;⁹⁹ twenty years later President White was assured that his university was "an institution of learning which more nearly approaches my cherished ideal of what our country most needs than any other hitherto known."¹⁰⁰ In the debate on the proposed new grant in 1872 he asserted that there was abundant proof that most of the thirty institutions were successful and that six or seven were "preëminent in character and usefulness." He named those of Michigan, Iowa, Kentucky, Illinois, Massachusetts, New York, and Connecticut as doing work of "priceless value" and thought Kansas and Missouri were not far behind.¹⁰¹ In 1891 Morrill wrote that it was a joy to know that in "nearly every state" the colleges were fully meeting the original purpose and public expectation in offering a liberal education to the great masses of the people.¹⁰² Two years later, in an appeal to his own university to resist separation, he expressed the belief that in only three States had there "appeared unrest and splenetic efforts to make local changes involving perhaps organic alterations."¹⁰³

⁹⁷ Commissioner of Agriculture, *Report*, 1865, p. 145-148; 1867, p. 332.

⁹⁸ C. S. Lyman to Morrill, Sept. 16, 1867; W. H. Brewer, "The Intent of the Morrill Land Grant," a summary, written about 1890, of the conference of the Sheffield faculty with Morrill in 1867. MS. in True Papers, U. S. Department of Agriculture Library. In common with the popular attitude, he confused the functions of model and experimental farms. *Congressional Record*, 44 Congress, 1 Session, Apr. 26, 1876, p. 2764.

⁹⁹ July 23, 1863, in reply to resolutions of the People's College board expressing gratitude to Congress, the President, Morrill, and Wade for the passage of the bill.

¹⁰⁰ May 21, 1883, in reply to invitation to attend commencement exercises.

¹⁰¹ *Congressional Globe*, 42 Congress, 3 Session, pt. 1, p. 36 (1872).

¹⁰² Morrill to E. W. Stanton, 1891.

¹⁰³ Morrill, *The Land-Grant Colleges*, 26.

While this favorable report may have been true as regards definitely organized movements against specific institutions, the "new education" as a system was subjected to continued attack—not lacking in splenetic tone—on the curricular and pedagogical innovations and even more on the source and basis of support. The burden of defense fell on the educators themselves. The acerbity of a McCosh and the disdain of an Eliot were challenges for academic peers, and the case for the affirmative was made largely by the same group in the Congressional investigation headed by a professorial member with "Oberlin notions."¹⁰⁴ The colleges were forced to justify themselves with the educational world as truly scientific and scholarly and with the business world as really serviceable. Both of these goals were to be reached ultimately by the laboratory, the classroom, and the demonstration contact rather than by the arts and devices of politics.

Systematized and reasoned subject matter and stabilized curricula came only with the experiment station, developed by the individual efforts of devoted scholars and technicians. This Federal establishment was the result of a combination of effort by representatives of the colleges with the Department of Agriculture. Commissioner Norman J. Colman in cooperation with State leaders seems to have been chiefly responsible for the formulation of the act.¹⁰⁵

Constituencies were won by carrying the results of research to the farmers by extension activities, likewise inaugurated by

¹⁰⁴ National Educational Association, *Proceedings*, 1873, p. 32-47, 60-73; White to Morrill, Aug. 25, 1873, Nov. 2, 1874; White, "The Relations of the National and State Governments to Advanced Education," a paper read before the National Educational Association at Detroit, Aug. 5, 1874. Offprint from *Old and New*, Boston, 1874; Inaugural address of President Edward Orton, Ohio Agricultural and Mechanics College, *Report*, 1874, p. 13; Atherton to Morrill, Jan. 10, 1874; Pollitt, *Biography of James K. Patterson*, 102.

¹⁰⁵ Chittenden, *History of the Sheffield Scientific School*, 1:200-203; Osborne, *From the Letter-Files of S. W. Johnson*, 165, 192-212; Hilgard, "Progress in Agriculture by Education and Government Aid," 540-541, 653-654; Davenport, "College Education in Agriculture," 51; A. C. True, *History of Agricultural Experimentation and Research in the United States, 1607-1925* (Washington, 1937), and (with V. A. Clark), *The Agricultural Experiment Stations in the United States* (U. S. Department of Agriculture, Office of Experiment Stations, *Bulletin* 80, Washington, 1900).

far-visioned and self-sacrificing educators. The agrarian crusade in its various stages, while promoting governmental aid, tried to control and direct the agencies in a narrow, short-sighted way, and the leaders generally sought separate agricultural colleges organized on a "practical" basis. No little persuasion, tact, and realistically demonstrated service were required to secure constructive cooperation.¹⁰⁶

Meanwhile the field of instruction was widening. Engineering, with the demands and opportunities of revolutionizing industry outdistancing all other branches in rate of growth, came to professional status and formed liaisons with the industries. Veterinary medicine and surgery gave justification for its designation; and domestic economy secured grudging admittance to the college realm. In military science and tactics regular companies under the direction of West Pointers replaced collegiate guerrillas. As in other colleges, systematic physical training was introduced and inter-collegiate sport developed to its modern prominence.

All of these expanding interests required a support for which the very limited original endowment—in most cases far below estimate—was wholly inadequate. Marked increase in charges was inexpedient as one of the most effective arguments for the industrial colleges had been their reduction in the cost of higher education. Before the first decade of the twentieth century most States hesitated to accept the responsibility of adopting as full "state colleges" the "national schools of science." Consequently, the main reliance must be upon additions to the land-fund endowment.

The twenty-year campaign culminating in the grant of 1890 has usually been represented as the single-handed combat of a brave, wise legislator against forces of ignorance, prejudice, and special interest; but throughout, the Senator was supported

¹⁰⁶ The following citations are typical for different parts of the country of the widespread agitation from the middle seventies into the nineties: Buckham to Morrill, June 15, 1892, and Herbert Myrick to Morrill, Oct. 1, 1890; W. W. Folwell, *The Autobiography and Letters of a Pioneer of Culture*, edited by Solon J. Buck, 214-215 (Minneapolis, 1933); J. M. White, "Origin and Location of the Mississippi Agricultural and Mechanics College," *Mississippi Historical Society, Publications*, 3:345-348 (Oxford, 1900). For the extension movement, see A. C. True, *History of Agricultural Extension Work in the United States* (Washington, 1928).

and largely directed by the advice, information, propagandist, and direct lobbying efforts of industrial leaders. In the early seventies they were organized into a college committee and in the middle eighties more formally and effectively into the Association of American Agricultural Colleges and Experiment Stations. More often than not they took the initiative in urging financial and protective measures.¹⁰⁷ The notion that Morrill's interests and activities were largely educational is contrary to the public record and to the private correspondence in which the tariff, internal revenue, capital improvement, and the inevitable unconscionable patronage demands bulk much larger.¹⁰⁸ The act of 1890 was deliberately and carefully planned, directed, and passed—with definite though not seriously restricting limitations as to use of the grant fixed by compromise with the embattled grangers—by the leaders of the association.¹⁰⁹ The same group was urging, to the end of Morrill's career, additional and better safeguarded appropriations upon the rather reluctant nestor.¹¹⁰

With these qualifications, the "Second Morrill Act" may be added to the trophies of the veteran legislator. Though his contribution to industrial education was less embracing, understanding, and determining than his admirers have represented, he served the cause faithfully and his contribution was real. If the movement had developed far beyond his original conception and design, it was incumbent on the veteran legislator to accept

¹⁰⁷ J. W. Twombly for Agricultural College Committee, to the various college presidents, Mar. 26, 1872, to Dr. Loring and associates, Mar. 27, 1872; Folwell, *Autobiography*, 208, 212, 216.

¹⁰⁸ Webster's *Dictionary* lists "Morrill Tariff" only. D. M. Matteson's "Analytic Index" in A. B. Hart's *American Nation Series*, 219 (New York, 1918) lists under Morrill's name, legal tender, silver, and protection, but has no reference to the college act. J. B. Turner's name, it may be noted, does not appear in this index. In the general index to Edward Channing's *History of the United States* neither Morrill nor Turner are mentioned.

¹⁰⁹ *Congressional Record*, 51 Congress, 1 Session, June 14, 1890, p. 6085, 6088-6089; Aug. 19, 1890, p. 8828, 8834-8835; White to Morrill, July 10, 1890; Goodell to Morrill, Aug. 20, 1890; W. I. Chamberlain, "The New Morrill Bill," *Cultivator and Country Gentleman*, 55:735-736 (1890); Cope and Mendenhall, *History of the Ohio State University*, 1:514; J. D. Walters, *History of the Kansas State Agricultural College*, 55 (n.p., 1909).

¹¹⁰ Alvord to Morrill, Feb. 16, 1891, Feb. 7, 1895; Goodell to Morrill, Nov. 21, 30, 1898; Morrill to Buckham, Nov. 30, 1898.

his increasing dignity and authority in academic circles without expressing undue surprise or hesitancy. Whether one believes with his rhetorical eulogist that he "walked by an inner light and drew the inspiration of his life from unseen and immortal springs," or adheres more realistically to the period, environment, and political record, he was a shrewd Yankee leader of the better sort, one of the best products of his time and region.¹¹¹ In fact, there can be no question of Morrill's legislative acumen and pertinacity—whether in support of a protective tariff or of a college land grant. It is a rare tribute to his instinct or foresight that he was able to capitalize a project of such progressing possibilities by becoming its official congressional champion and hence, considering the far more vivid popular appeal of the toga than of the gown, the traditional father. And verily he has had his reward.

The enduring achievements of the industrial movement have been, not primarily in the realm of political enactment or administrative policy, but rather in that of the content, technique, and application of higher education and research, and it is in such leadership that the true inspiration and guidance have been found. The uniquely effective place which the land-grant college has come to occupy in the scheme of American education has resulted not from any cleverly devised act struck off at a given time but from a gradual process of adjustment to changing economic and social needs, an adaptation to varied environments, and competent experimentation in subject matter and method. Consequently no one individual, whether versatile and zealous agitator or skilled and patient legislator, could have given the creative impulse. The long line of scientists and educational reformers from the modern intellectual and social awakening of the latter eighteenth century are the real fathers. To provide physical memorials to all of them would exceed the limits of the most extended campus; but the colleges themselves, as they exist in organization and spirit, are their enduring monuments.

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¹¹¹ Atherton, "Legislative Career of Justin S. Morrill," 63.

NEWS NOTES AND COMMENTS

SEVENTY-FIFTH ANNIVERSARY PUBLICATIONS

On the occasion of its seventy-fifth anniversary, the U. S. Department of Agriculture issued a brochure, *Washington, Jefferson, Lincoln and Agriculture* (Washington, D. C., Bureau of Agricultural Economics, 1937), prepared by Everett E. Edwards, and a bulletin, *The Response of Government to Agriculture* (Washington, U. S. Govt. Print. Off., 1937), by Arthur P. Chew.

DECEMBER MEETING OF THE AGRICULTURAL HISTORY SOCIETY

The Agricultural History Society met concurrently with the American Historical Association and other historical societies at Philadelphia, Pennsylvania, on December 29-31, 1937. The joint literary session of the Agricultural History Society on Wednesday morning, December 29, was devoted to the following papers: Proposals of Government Aid to Agricultural Settlement during the Depression of 1873-79, by Professor Albert V. House, Jr. of Wilson Teachers College, Washington, D. C.; The Father of Cooperative Creameries in the Northwest, by Mr. Everett E. Edwards of the U. S. Bureau of Agricultural Economics; and Turnips and Romanticism, by Mr. Paul H. Johnstone of the Agricultural Adjustment Administration. Professor Robert E. Riegel of Dartmouth College acted as chairman of the session, and about ninety were in attendance. Following the formal papers, Mr. Herbert A. Kellar of the McCormick Historical Association presented impromptu remarks on the rôle which the Philadelphia Society for Promoting Agriculture played as a pioneer in the dissemination of information concerning improved methods in farming. At the luncheon sponsored by the Agricultural History Society on Friday, December 31, its president, the Honorable M. L. Wilson, Under Secretary of Agriculture, presented an address on "Cultural Patterns in Agricultural History." Mr. Kellar, Dr. Russell H. Anderson, Dr. Kathleen Bruce, Dr. Solon J. Buck, and Professor Frederick Merk contributed to the discussion.

FEBRUARY, MARCH, AND APRIL MEETINGS

The Washington, D. C., membership of the Agricultural History Society sponsored a series of three meetings in the South Building of the U. S. Department of Agriculture during February, March, and April 1938.

The first of these meetings was on February 8. Dr. C. J. Galpin spoke on the development of the science and philosophy of American rural life during the last fifty years. Dr. Carl C. Taylor presided and directed the discussion. The text of this address is printed elsewhere in this volume.

At the second meeting on March 25, Mr. A. B. Graham discussed the early development of boys' and girls' clubs and agricultural extension, and Mr. J. Phil Campbell contributed a discussion of "Action Programs in Education" in the Southeastern States. Mr. C. B. Smith presided.

Mr. Herbert A. Smith was in charge of the third meeting on April 19. He read an interesting paper on the early history of the forestry movement in the United States.

CURRENT ARTICLES AND BOOKS ON THE HISTORY OF AMERICAN AGRICULTURE

General or unclassified: R. H. Anderson, "Getreidesaat in Neununddreissig Jahrhunderten," *Jahrbuch der Gesellschaft für Geschichte und Literatur der Landwirtschaft*, 36:2-10, 17-23 (1937), a German version of the article by the same author, "Grain Drills through Thirty-nine Centuries," in *Agr. Hist.*, 10:157-205 (October 1936). C. J. Brand, "Making Agricultural History; Seventy-five Years of the U. S. Department of Agriculture," *Fertilizer Rev.*, 12 (5):2-3, 15 (September-October 1937). Elizabeth Brook, ed., "Federalist Jeremiahs," *Amer. Hist. Rev.*, 43:74-78 (October 1937), letters relating to the management of an estate of about 100,000 acres owned by James Le Ray du Chaumont in New York and Pennsylvania. J. E. Brooks, *Tobacco; Its History Illustrated by the Books, Manuscripts and Engraving in the Library of George Arents, Jr., Together with an Introductory Essay, a Glossary and Bibliographical Notes*, vol. 1, 1507-1615 (New York, Rosenbach Co., 1937. 543 p.). Lyman Carrier, "The United States Agricultural Society, 1852-1860," *Agr. Hist.*, 11:278-288 (October 1937). E. E. Edwards, "Middle Western Agricultural History as a Field of Research," *Miss. Valley Hist. Rev.*, 24:315-328 (December 1937), "References on Agricultural History as a Field for Research," U. S. Dept. Agr., Library, *Bibliographical Contributions* 32, 41 p. (Washington, D. C., December 1937), "Some Sources for Northwest History: Agricultural Periodicals," *Minn. Hist.*, 18:407-414 (December 1937), and *Washington, Jefferson, Lincoln and Agriculture* (Washington, D. C., Bureau of Agricultural Economics, 1937. 102 p.). G. E. Fussell, "Agricultural History for Farm Economists," *Agr. Hist.*, 11:302-307 (October 1937). C. J. Galpin, "The Story of My Drift into Rural Sociology," *Rural Sociol.*, 2:115-122, 299-309, 415-428 (June, September, December 1937). J. T. Gano, "The Desert Land Act since 1891," *Agr. Hist.*, 11:266-277 (October 1937). F. M. Jones, *Middlemen in the Domestic Trade of the United States, 1800-60* (Urbana, Univ. Ill., 1937. 81 p.), reviewed by L. E. Atherton in *Miss. Valley Hist. Rev.*, 24:395-396 (December 1937). Gregory Mason, "Native American Food," *Nat. Hist.*, 37:309-318 (April 1936). E. S. Meany, Jr., "Food Administration Papers for Washington, Oregon and Idaho, Deposited in the National Archives," *Pacific Northwest Quart.*, 28:373-382 (October 1937). F. G. Morris, "Environment and Regional Development in the Colonial Period," *Social Forces*, 16:12-23 (October 1937). "Orange Judd-100 Years Old; For a Century This Firm has Published Books on Gardening and Agriculture," *Publishers' Weekly*, 129:800-803 (Feb. 15, 1936). Gifford Pinchot, "How Conservation Began in the United States," *Agr. Hist.*, 11:255-265 (October 1937). R. F. Pollard, "Century Old Farms," *Cornell Countryman*, 35 (1):2-3 (October 1937). P. L. Rainwater, ed., "Excerpts from Fulkerson's 'Recollections of the War Between the States'," *Miss. Valley Hist. Rev.*, 24:351-373 (December 1937). R. R. Russel, "The Economic History of Negro Slavery in the United States," *Agr. Hist.*, 11:308-321 (October 1937). Joseph Schafer, "Was the West a Safety Valve for Labor?" *Miss. Valley Hist. Rev.*, 24:299-314 (December 1937), "Some Facts Bearing on the Safety-Valve Theory," *Wis. Mag. Hist.*, 20:216-232 (December

1936), and "Peopling the Middle West," *ibid.*, 21:85-106 (September 1937). C. B. Sherman, "The Legal Basis of the Marketing Work of the United States Department of Agriculture," *Agr. Hist.*, 11:289-301 (October 1937), and "Rural Fiction as Interpreter of Rural Life," *Rural Sociol.*, 2:36-45 (March 1937). H. W. Smith, *A Sporting Family of the Old South* (Albany, N. Y., J. B. Lyon Co., 1936. 477 p.), reviewed in *Ga. Hist. Quart.*, 21:398-399 (December 1937), concerning John Stuart Skinner's family. L. O. Stewart, *Public Land Surveys; History, Instructions, Methods* (Ames, Ia., Collegiate Press, 1935. 202 p.). Arnold Tilden, *The Legislation of the Civil-War Period Considered as a Basis of the Agricultural Revolution in the United States* (Los Angeles, Univ. South. Calif. Press, 1937. 160 p.). A. H. Verrill, *Foods America Gave the World* (Boston, L. C. Page & Co., 1937. 289 p.). California: W. H. Ellison, "History of the Santa Cruz Island Grant," *Pacific Hist. Rev.*, 6:270-283 (September 1937).

Colorado: O. B. Peake, *The Colorado Range Cattle Industry* (Glendale, Calif., A. H. Clark Co., 1937. 357 p.). W. M. Rockwell, "Cow-land Aristocrats of the North Fork," *Colo. Mag.*, September 1937.

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Kansas: P. W. Gates, "A Fragment of Kansas Land History; the Disposal of the Christian Indian Tract," *Kans. Hist. Quart.*, 6:227-240 (August 1937). John Ise, *Sod and Stubble; The Story of a Kansas Homestead* (New York, Wilson-Erickson, 1936).

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Maine: C. M. Wilson, *Aroostook; Our Last Frontier; Maine's Picturesque Potato Empire* (Brattleboro, Vt., Stephen Daye, 1937. 240 p.).

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Agricultural Experiment Station, 1887-1937," *Oreg. Agr. Expt. Sta., Circ.* 125, 28 p., illus. (1937).

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